

CITY OF MELBOURNE



REPORT OF HEALTH COMMITTEE

for the

YEAR ENDED DECEMBER 31
1949

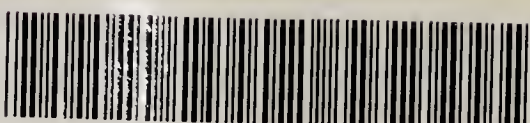


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CITY OF MELBOURNE

Report of the Health Committee for the Year 1949

Members of Committee:

Councillor Boulton (Chairman).
Councillor Barry.
Councillor Sir Raymond Connelly (deceased 4th May, 1949).
Councillor Evans (appointed 23rd June, 1949).
Councillor Madden.
Councillor Sir Harold Gengoult Smith.
Councillor Selleck.

The Health Committee submits, for the information of the Council, a report regarding the work carried out under the direction of the Committee during the year ended 31st December, 1949.

REPORTS OF OFFICERS

A report by the Medical Officer of Health (Dr. John Dale) upon the work of the Health Department during 1949, and upon the health of the inhabitants of the City generally, is attached hereto, together with reports by Dr. Hilda Kincaid upon child welfare work; by Dr. Hilda Bull, upon infectious diseases; by Mr. T. G. O. Jordan, the Chief Health Inspector, on the routine work of the Department; by Messrs. Dunn, Son and Stone, City Analysts; by Mr. Reeve, Dental Officer, upon the work of dental centres at Kensington and North Carlton, and by the Senior Bacteriologist of the Bacteriology Department, University of Melbourne. Full details of the various health activities of the Council are contained in these reports.

CHILD WELFARE

The report of Dr. Hilda Kincaid upon the work of the Child Welfare Branch gives details of the year's activities, and statistics for the year reveal that, although the number of births registered in the City (1,790) was very close to the number registered in 1948 (1,786), it is still approximately 12½% below the maximum number (2,033) recorded in 1947. The infant mortality rate computed by the Government Statist, 18.99 per 1,000 births, is most satisfactory, and is the lowest ever recorded. The neo-natal death rate was 13.9 and the death rate of children between the age of one month and one year was 5.03.

It is interesting to note that an analysis of the birth notifications of the City for the year showed that approximately 84% of the babies had parents who were both Australian born, 10.8% had parents one or both of whom were not of British birth. Approximately 7% of the births were ex-nuptial.

The outstanding adversity of the year was the outbreak of poliomyelitis which began early in March and became widespread throughout the State. On the advice of the Consultative Council for Poliomyelitis, kindergartens were closed during the last quarter of the year, tonsillectomies were postponed, whooping cough injections were discouraged and extraction of teeth limited.

The Committee again continued its assistance to parents in indigent circumstances by the supply of milk, the total expenditure for the year being £897, of which the amount of £464 was refunded by parents.

The annual grants made by the Council to kindergartens and creches for the year 1949 were the same as for previous years, viz., £1,000 and £500 respectively.

The annual grant of £750 was again made by the Council to the Victorian Civil Ambulance Service.

The total amount expended by the Council on the conduct and maintenance of the Child Welfare Centres in the City of Melbourne during 1949 was £9,335/2/5, of which £2,112/5/7 was contributed by the State Government.

The Committee desires to again record its appreciation of the services of all those who have contributed to the carrying out of Child Welfare Work throughout the year, especially the Committees of Management of the Lady Huntingfield Free Kindergarten, the Hopetoun Free Kindergarten and the Fawknor Park Pre-School Centre, and the voluntary workers in all the other kindergartens and creches in the City of Melbourne.

INFECTIOUS DISEASES

The accompanying reports of the Medical Officer of Health and Dr. Hilda Bull show the amount of preventative work carried out against Infectious Diseases which was on the whole very good, marred only by the widespread epidemic of poliomyelitis in which the population of the City of Melbourne shared, but to a lesser extent than in 1937.

There were only 36 definite cases of poliomyelitis, 24 males and 12 females, and from the accompanying reports it will be seen that 50% of the cases occurred in the first five years of life.

Some association has been alleged, both in Australia and England, of poliomyelitis after immigration, but the full facts are not yet known, and the policy adopted will be in conformity with expressed scientific opinions not to carry out prophylactic injections against whooping cough when poliomyelitis is prevalent.

The number of tuberculosis cases under supervision during the year, and the number of deaths are approximately the same as they have been since 1945, when the higher incidence noticed during the war years began to revert to earlier and lower figures. The total number of cases under supervision during the year (inclusive of cases notified after death and repatriation cases) was 537, as against 521 in 1948, 531 in 1947, 521 in 1946 and 526 in 1945.

While the number of new cases notified during 1949 totalled 119, it must be remembered that "new" is applied to those patients who have come to reside in the City during the last year.

It is interesting to note that the number of deaths from tuberculosis (57), which comprised 48 males and 9 females, is the lowest for 10 years with the exception of years 1948 (47) and 1946 (53), and that the number of female deaths is always lower than that of males because of the increased tendency for the older males to die of tuberculosis.

The prevalence of Diphtheria and Scarlet Fever in the City remained at the same low incidence as for the previous year, the number of Scarlet Fever cases being the lowest yet recorded and there were no deaths.

Cerebro-spinal meningitis was more prevalent than it has been for five years, and accounted for three out of five deaths due to infectious disease, the other two being from diphtheria and poliomyelitis.

It is pleasing to note that the number of children (1,248) who attended the Council centres for immunization compare very favourably with the number of individual babies under 12 months (1,440), which can be contributed to the publicity being given to the benefits of immunization.

The psychological examinations of pre-school children at the Pigdon Street Nursery School were again conducted, and the findings by Dr. Bull in regard to the relationship of education and economic status with I.Q. of the child is most interesting, and shows the difficulties which beset a child and which, if not righted, could hamper it throughout its entire life.

DENTAL

During the year an additional Dental Centre was opened at the North Melbourne Centre, where Mr. Reeve, the Council dentist, carries out work mainly on a prophylactic basis, beginning at the earliest possible age in order to prevent altogether the development of caries.

Children between the ages of one and five years were examined and treated at the Council's three Centres in Carlton, Kensington and North Melbourne.

INFECTIOUS DISEASES HOSPITAL, FAIRFIELD

The Council's contribution towards the Queen's Memorial Infectious Diseases Hospital amounted to £9,623/19/-.

The contributions for the past five years were:—

1945	.....	.....	.....	.....	.....	.....	£12,325	10	2
1946	.....	.....	.....	.....	.....	.....	9,957	2	2
1947	.....	.....	.....	.....	.....	.....	10,066	8	1
1948	.....	.....	.....	.....	.....	.....	11,400	4	6
1949	.....	.....	.....	.....	.....	.....	9,623	19	0

FOOD SUPPLIES

The attached report of the Chief Health Inspector gives details of the inspections of food premises and of examination of foods.

The customary systematic inspections were carried out, and results can be regarded as relatively satisfactory.

Unfortunately, the housing position continues to be unsatisfactory, due to the shortage and control of building materials, and no progress whatever has been made in the elimination of sub-standard properties, and it appears as though this condition will continue to exist until the problem of the housing shortage has been overcome.

During the year 358 pieces of glassware, 769 pieces of crockery and 133 pieces of kitchenware were seized and destroyed from various cafes and eating houses, etc.

The quality of the milk supply has been maintained in a very satisfactory manner, the average percentage of fat being 4.29, whilst only 1.7% of the total samples taken failed to comply with the standard.

The number of food samples which failed to comply with the standard was 23 or 5% of the total number submitted for analysis. These included milk 6, chopped meat 8 and sausage meat 9.

SWIMMING BATHS

Regular sampling for bacteriological examination of the water in the several swimming pools throughout the City was carried out during rush periods at the pools, and the results of the examinations showed that the purification plants were operating in quite a satisfactory manner.

RODENT CONTROL

The usual attention has again been given to the problem of rat infestation, 84,000 poison baits having been prepared, of which 54,000 were laid by the staff and 30,000 supplied to ratepayers with directions as to how the bait should be used.

HOWARD STREET CRECHE

During the year the Committee of Management of the Howard Street Creche, North Melbourne, approached the Council with the request that the Council rebuild the Creche building, and re-equip it to conform to modern requirements, and in return the Committee of Management would hand over the freehold title of the property to the Council.

The Council agreed to the proposal and the work of rebuilding and re-equipping has now been carried out at a cost of over £6,000, and a very fine Creche is now available for the use of ratepayers and residents of the North Melbourne district.

The Creche will continue to be conducted by the Committee of Management, and as is the practice with other kindergartens, etc., half maintenance costs will be met by the Council.

POWLETT STREET RESERVE KINDERGARTEN

As a result of the numerous requests received from ratepayers residing in East Melbourne, the Council approached the Minister for Lands to have an area of land of approximately two acres excised from the Powlett Street Reserve in order that a Kindergarten could be established. The Minister agreed to amend the Crown Grant to allow facilities for Child Welfare to be provided, and the Building Directorate approved of a permit being issued for the work to be carried out.

It is anticipated that work on the construction of the Centre will commence in the very near future.

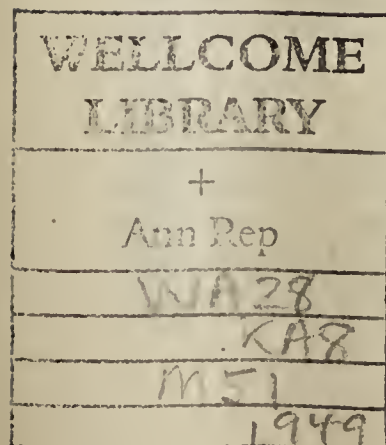
RETIREMENT OF Dr. JOHN DALE

As Dr. John Dale, the Council Medical Officer of Health, is due to retire from the Council's service early in the New Year, the Committee, in order to familiarise the appointee with the duties of the position, invited applications throughout Australasia for the position of Medical Officer of Health, and the Council approved of the appointment of Dr. Philip Gilbert to the position.

Dr. Gilbert was formerly Medical Officer of Health of the Sydney City Council.

G. R. BOULTON, *Chairman.*

H. S. WOOTTON, *Town Clerk.*



Report of the Medical Officer for Health

Health Department,
Town Hall Chambers, Melbourne.
2nd May, 1950.

The Chairman and Members,
Health Committee:
Gentlemen,

I beg to present my Annual Report for the year 1949.

I feel I must preface this, my last report as Medical Officer of Health for the City, by expressing my appreciation of the kindness and consideration shown to me by the successive Lord Mayors, Aldermen, and Members of the Council, and particularly to the Chairman and members of the Health Committee, during the twenty-three years of my service.

I inherited with my office a tradition of progress and research, as was evidenced by the immunisation campaign against diphtheria already inaugurated in the City and by the existence of a Metropolitan Committee to combat infantile paralysis, the work of which was initiated and sustained by the Council.

My chief interests on my arrival here were centred mainly in child welfare and in health education, and these have continued as my chief enthusiasm. In both spheres great progress has been made. As regards Child Welfare, it is not too much to say that it is the foundation, pillar or keystone—take your choice—of hygiene. And if I could direct the ambitions of this beautiful City with its lovely gardens, fine streets and its many amenities, it would be towards the boast that Melbourne was a grand place for children to live in.

The amazing advances of medicine and its allied sciences in the last 100, and particularly in the last 50 years, have made it possible to say that the physical and mental needs of mothers, infants and children are now known—not perhaps in every detail for each individual, or in relation to the less common accidents of heredity and development—but in all the main outlines as applying to the average child. It is clear that unless these needs are supplied, the oncoming generation must be stunted. No City can be fine if its inhabitants are stunted. No society can be stable unless its members are fully equipped as citizens.

The first number of the British Medical Journal for 1950 was devoted to a review of the progress of medicine in the last 50 years, and an article illustrating that progress by vital statistics gives many startling figures, including those showing the astonishing improvement in infantile mortality and in the expectation of life at various ages. Even in distressed Britain, at present rates, half the girls born may expect to live to be 75, and half the boys to be 70, whilst in this relatively fortunate land the figures would be higher still. In almost every branch of medicine great progress has been achieved, particularly perhaps in the control of infections. Life is now much safer, freed from much of the tragedy of premature death and disablement; but this safer life cannot be enjoyed by all, or to the full, unless the needs of the children—Nature's specifications for their physical and mental growth—are supplied.

Infant Welfare in Australia, in Victoria, in Greater Melbourne, and in Melbourne City has progressed in a manner which bears comparison probably with any other parts of the world. I am proud of the child welfare work in Melbourne, the Council's part in which has been carried on over the whole period by my two assistants, Doctors Kincaid and Bull, to whom, with their staff and the many workers in official and voluntary organisations with whom they have collaborated, the credit is mainly due. I must pay tribute to the wonderful work of the voluntary organisations engaged in infant welfare, many of which were in active operation before my arrival in Melbourne. I would mention particularly the Victorian Baby Health Centres Association, which has trained most of the infant welfare nurses in the State and conducted the first centres in the City, and with which our centres are still affiliated; the Free Kindergarten Union of Victoria which has set and continually seeks to improve the high standards of kindergarten work; and the principal churches which have for many years maintained kindergartens in the City, pictures of some of which are shown in this report. It has been a great pleasure and encouragement to co-operate with the office-bearers and staffs, past and present, of all these bodies. Their help has been invaluable and is most gratefully acknowledged.

The City of Melbourne has infant welfare services, including its many kindergartens, which are perhaps not excelled by any comparable city anywhere, and it has adopted a comprehensive scheme for their extension; but though the foundations of the work seem sound and its progress encouraging, it is far from complete. A large proportion of our children must still be relatively stunted and uncivilised, unless the programme is completed and linked with similar great improvements that are needed in the schools proper.

The constant education of the community in matters of health is obviously necessary since it is only with its intelligent co-operation that real progress is possible. Some 20 years ago even the late Sir James Barrett was doubtful whether he could arrange with the editors of the principal newspapers to have articles on health published during a Health Week. Since then the situation has completely altered. Newspapers and broadcasting stations give ample space or time to matter of all kinds relating to health. The women's sections of the Press and women's sessions on the air have become, on the whole, very reliable sources of up-to-date information on health matters, particularly those relating to diet and child welfare, and I think it probable that this activity has played a considerable part in bringing about the improvements mentioned.

I remember with great pleasure my own participation in the very early days of broadcasting and throughout my service have enjoyed talking over the air, writing articles and giving talks or lectures to the many societies, clubs and groups of enthusiasts, throughout the metropolitan area and beyond it, who have invited me to address them.

Publicity nowadays is a necessary side of most activities. Great Britain has a well-established "Council of Health Education" and New South Wales has a publicity section of its Health Department. It would be well if Victoria followed suit. I have repeatedly urged this in commenting upon our relatively poor publicity in regard to such matters as diphtheria immunization. Great Britain and New South Wales have had on such subject admirable posters, the production and distribution of which can only be undertaken by a central authority.

From some points of view the publicity on health matters in recent decades has had its unfortunate side. Detailed information on actual diseases of different parts of the body is apt to produce in persons who are not well-informed, and whose social relationships are unsatisfactory, an undesirable condition of "health-consciousness" whereby they are encouraged falsely to relate their troubles to disease of this, that and the other part of the body. This widespread tendency has long been exploited and fostered by advertising matter urging the sale of remedies alleged to cure or prevent almost every known ailment. Such "health-consciousness" is, indeed, deplorable. The situation can be remedied only slowly and gradually by an improved understanding of ourselves and of nature and of what constitutes the good life. Those of us who are entrusted by the community to safeguard their health have indeed come to realise that health, the name of which trips so easily from every tongue, is in fact very elusive in its nature. What indeed is health! It seems to be given to those who are fortunate enough to be able to exercise freely their inherent powers untroubled by fear and anxiety. Such people are well, and apart from physical and biological accidents, the nature cure, prevention of which constitutes the sphere of medical activity, their welfare is assured. The anxious or unhappy person, on the other hand, is never well. The subject is a vast and profound one which cannot be pursued here. Let it suffice to say that we are coming to realise, vaguely as yet, but nevertheless with assurance, that good health is the quality of the good life towards which all great teachers have pointed and its touchstone is concord or happiness. It is not purchasable; it is not secured by medicines or elixirs, or indeed, by the utmost efforts of the medical profession working as such, however elaborate their equipment or elevated their hospitals. The doctors have a great part to play in safeguarding health, but it is with the teachers proper that there lies the main responsibility for the quality of life in the future.

VITAL STATISTICS

The health experience of the City of Melbourne in 1949 was again relatively good. Apart from the occurrence of the epidemic of infantile paralysis throughout the State which caused one death and a number of cases of severe crippling in the City, there was relatively little serious sickness; and the infantile mortality rate of the City, which was relatively high in 1947 and 1948, made amends by falling to a record low figure of 19 per 1,000.

TABLE I

Year	Estimated Mean Population	No. of Births	Birth Rate	No. of Deaths	Death Rate	Infantile Mortality Rate per 1,000 live births
1935-39 (5-year av.)	92,902	1,137	12.2	1,141	12.2	42
1940	93,650	1,257	13.7	1,210	13.3	54
1941	95,400	1,303	14.2	1,186	12.9	37
1942	95,500	1,499	16.1	1,283	13.0	44
1943	99,393	1,804	18.1	1,226	12.3	44
1944	100,485	1,655	16.5	1,227	12.2	32
1945	101,130	1,709	16.9	1,225	12.1	26
1946	105,300	2,033	19.8	1,177	11.5	23
1947	99,868	1,961	20.2	1,281	13.2	36
1948	101,000	1,786	18.2	1,163	11.9	25
1949	101,200	1,790	18.2	1,184	12.0	69 19

The principal vital statistics of the year are shown in Table 1. The birth rate is the same as for 1948. The birth rate of the State as a whole is slightly less than that of last year, and its future course is likely to be affected considerably by the amount and character of immigration. The death rate is 12.0. Infantile mortality, as already stated, shows a record low for the City, 19, for the Metropolitan Area 20, and for the State as a whole 22. These favourable figures are being paralleled and closely followed in many countries of the Western civilisation, the rate in London, for example, for 1949 being 31. The rapid fall in recent years is clearly associated with the relatively improved economic conditions of the poorer classes. Among the well-to-do rates have been low for many years and are still appreciably below those for the community as a whole.

CHILD WELFARE

Dr. Kincaid presents as usual her report upon the child welfare activities of the City, which proceeded smoothly, and I am very conscious that the smoothness is due to the skill and devotion of Dr. Kincaid and her excellent staff, past and present, of sisters and voluntary helpers. The emphasis is now mainly upon the health of the pre-school child, and particularly on the encouraging work in the kindergartens to which I have already referred. The continued delay in the provision of new accommodation and the shortage of trained teachers are to be deplored, but are inevitable under present circumstances. As Dr. Kincaid indicates it is to be hoped that the hold-up may be utilised in research work in the existing institutions in a manner which will maintain enthusiasm and equip us more adequately to extend the work when expansion becomes possible.

The increasing attention now being given to behaviour problems in little children, which are often indicative of unfortunate relationships in the home, is particularly important. There is no doubt at all that continued unhappiness or frustration in early life can have disastrous effects on the individual throughout his whole career. The touchstones of health at this stage also are the eager friendliness and spontaneity of the child. Progress and improvement in this phase of the work, especially if accompanied by research, involves the employment of considerable staff, including some with special training in psychology.

DENTAL SERVICES

The expansion of the dental work to provide a service at the North Melbourne Centre, in addition to those in Kensington and Carlton, is a very welcome move. It is carried out by our dentist, Mr. Reeve, mainly on a prophylactic basis, beginning at the earliest possible age in order to prevent altogether the development of caries. This is possible to a large extent, and any attempt to deal with the problem of children's teeth by treatment alone is certain to prove a hopelessly Augean task.

INFECTIOUS DISEASES

The report by Dr. Hilda Bull describes in detail the occurrence of infectious diseases and the immunization work which was carried out during the year. Records of the cases of poliomyelitis which occurred in the City indicate that the majority of the cases have escaped or are likely to escape any serious disablement.

The number of cases of tuberculosis in the City remains large, but the circumstances of the City are peculiar and the trend in the State generally shows a relatively satisfactory diminution. The State Department of Health is showing great activity in this sphere and we are anxious to co-operate as fully as possible in the work.

GENERAL

The work of the inspectors under the guidance of Mr. T. G. O. Jordan, Chief Health Inspector, details of which are given in his report, proceeded satisfactorily.

The major problem in this field continues to be that of housing, and it is disappointing and somewhat remarkable to reflect that during my service little, if any, progress can be recorded. Twenty-three years ago I reported that a very large proportion of the houses in certain areas, particularly South and Central Carlton, North and West Melbourne, and in parts of Kensington, were so cramped, lacking in amenities and dilapidated, that they could not be regarded as dwellings at all suitable for the ordinary family, and could not be made so. They were fit only for demolition. In the intervening years many surveys have been made, many plans have been drawn up, but although a few hundreds of houses have been demolished and the small Molesworth Street area in North Melbourne has been cleared and partly re-built as flats, the situation as a whole is no better and probably rather worse than it was 23 years ago.

It is unnecessary to try to set out in detail the reasons for this unhappy state of affairs. Acute housing shortage exists at the moment and in view of immigration is likely to persist for many years. It is, therefore, impossible to destroy or close any structure that serves as a habitation, and it is necessary that all of them should be maintained as habitable as possible. Much of the energy of the staff is expended in the effort to ensure that urgent repairs are carried out, and this is still hampered by the difficulty of obtaining small amounts of material.

The future of the blighted areas of outworn shacks on fine broad streets and in narrow alleys leading therefrom is of great interest. They are close to the centre of the City and of great potential value and they must be re-planned and re-built. Some of our existing open places are of elephantine proportions and some parts thereof should be used for housing and equivalent areas of open space made available in congested areas.

One hopes that in parts of Carlton accommodation will be built for students and staff of the University, and that room will be found there also for educational institutions which should be near the University, such as extensions of the Teachers' College and a new college for the training of kindergarten teachers.

On large parts of the areas new housing will be erected, either by public authorities or by private enterprise. Regarding the erection of houses by public authorities, a bad policy has been introduced, originating, I believe, in Great Britain, but now adopted elsewhere, including Victoria. I refer to the granting of rent subsidies to all or certain of the occupants. Such a policy cannot be administered justly; in fact, it involves grave injustice. Why should certain families only be subsidised "on the side" at the expense of their fellow citizens, so many of whom have equal claims? Any public assistance given to families should obviously be given to all with similar claims, after the manner of child endowment.

There are strong arguments in favour of the building of housing accommodation by public authority. Such accommodation should always be of good construction, equipped with all reasonable amenities, and so planned as to avoid eventual "blight" of the area. When it is so planned and built it should be offered for sale or rental, by ballot if necessary, at such a figure as would ensure that the community was recouped for the full cost. There would be an eager demand for such accommodation; the housing shortage would be just as effectively relieved as it is by the present methods, and the great barrier of the cost of housing projects would be removed.

Incidentally, it is not true, as has been said, that every man has a natural right to a house. The only natural rights a man has are that his parents should care for him till he is able to fend for himself and that he should struggle to satisfy his desires. All the other rights of which one hears so much in charters and in various pronouncements, depend upon the mutual agreement and co-operation of the members of a community and vary according to its social pattern and stability.

MILK SUPPLY

I regret that no satisfactory control of Melbourne's milk supply has been achieved during my service. I consider that our milk supply, nevertheless, is a relatively good one. It is of very high quality from the standpoint of chemical analysis and as regards cleanliness and safety I believe there has been a steady improvement. In the latter respects, however, it is not as clean and safe as it could and should be. I am still of the opinion that the scheme of municipal enterprise adopted in Wellington, New Zealand, afforded the safest, cleanest, richest and cheapest supply, with the fairest deal to the farmers, of which I have ever heard. It is remarkable that the enterprise has not been copied, as far as I know, in other parts of New Zealand or elsewhere. Probably the objections to "socialisation" have prevailed, and I agree that there are valid objections to socialisation until the community is sufficiently educated and civilised to conduct social enterprises properly and fairly. And when we have achieved that, as we eventually must, the arguments for and against community ownership and control will be conducted on the basis of convenience and common sense and without undue emotion.

I conclude this report by expressing my most sincere and grateful thanks to all the members of my staff, and most particularly to Dr. Hilda E. Kincaid and Dr. Hilda W. Bull, the Chief Health Inspector, Mr. T. G. O. Jordan, Sister D. Phillips, and Mr. W. J. Campbell, Senior Clerk, and two members of the rat staff, Messrs. A. Forbes and H. Hill, all of whom have been with me during the whole of my service.

JOHN DALE,

Medical Officer of Health.

Child Welfare

Health Department,
Town Hall Chambers, Melbourne.
24th April, 1950.

Medical Officer of Health:

Sir,

I have the honour to report on the Child Welfare activities for the year 1949.

The year's work has been generally satisfactory both with mothers and children, and has been characterised by the lowest infantile mortality rate yet recorded. This rate (18.9) is below the rate both for Greater Melbourne (20.2) and for Victoria as a whole (21.8).

The outstanding adversity of the year was the outbreak of poliomyelitis which began in the City early in March and became widespread throughout the State. On the advice of the Consultative Council for Poliomyelitis, kindergartens were closed during the last quarter of the year; tonsillectomies were postponed, whooping cough injections were discouraged and extraction of teeth limited.

The enforced closure of kindergartens seemed, at first, a calamity; but, after thought and consideration had been given to the possibilities, it was decided that staffs should remain on duty to give help and advice to parents on the care of their children and on adaptation of available home material for recreative and developmental play; also that rosters of small groups of children—either in family units or in units who would contact each other in any case outside the kindergartens—would be cared for in the kindergartens in sequence. This enabled the children to keep in touch with the teachers and the equipment, and gave mothers a regular respite. Much excellent work was done and showed how effective close personal touch with children and parents in small groups could be, even though such groups did not meet with regular frequency. In fact, I think the experience that kindergarteners had during the closure helped to illuminate avenues of community social work which tend to become obscured in the stress of the work necessitated by the daily routines of a full, regular kindergarten programme. This was particularly so in the Lady Gowrie Centre, where the director had more time and opportunity during the closure to visualize possibilities. As a result of her deliberations she outlined a project which I consider to be an excellent one and which we will try out there during the coming year. In brief, this project envisages a fuller identification of the Kindergarten Centre with the surrounding community, (a) by extending the number of pre-school children to be admitted, by spacing of attendances, (b) by greater use of the Health Centre to further work with parents and toddlers in the district who are not directly touched by the kindergarten, and (c) by use of the kindergarten for adult education and recreation of *any* residents nearby. This last to be done by arranging lectures, plays, films, folk dancing, music, handcrafts, etc. The introduction of such adult education and recreation will, of necessity, demand a desirable and increased co-operation with other bodies interested in community work such as the Council of Adult Education, National Fitness Council, etc.

Whilst the kindergarten staffs had the extra free time the State Director of Maternal and Child Hygiene and her officers arranged a series of conferences and lectures for them on one morning of each week. These were very successful and gave opportunity for a widening of knowledge and outlook, since the lecturers were many and varied, and spoke with authority on their own subjects.

During the closure medical examinations were not made in kindergartens but individual appointments were made for kindergarten children to attend the nearest Health Centre for examination.

Attendances of both babies and pre-school children at Health Centres diminished a little at the peak of the "polio" scare but the general supervision did not materially suffer. In August, September and October measles was very prevalent but we heard of very few complications. In fact, after measles the remark is so frequently made by mothers that a child "has never looked back" or that "his appetite cannot be satisfied" that one wonders if infection by a mild form of infectious disease does not indeed act as a stimulus to metabolism.

On the whole, one can report that the standard of health, nutrition, cleanliness and personal hygiene of children in the City has been good and the co-operation of the mothers very satisfactory. One has the impression also that feeding problems have been less troublesome. If this is so, it is probably due to a saner parental outlook about food and feeding habits—and to a gradual easing of the psychological tension which parents are apt to work up if their children do not eat as they think they should.

Accidents in kindergartens are uncommon and generally of a minor nature; accidents even in homes or streets do not appear to be unduly numerous. An article in a recent "Medical Journal of Australia" said that two American doctors had stated, on the experience of the Metropolitan Life Insurance Co. of New

York, that accidents there to-day represent the first cause of death among children. There is also a statement in the "Lancet" that in England there is a very high accident rate from burns and scalds. In the City of Melbourne, unfortunately, deaths of children from accident are far from unknown but the rate does not appear excessive. This year there were two accidental deaths in children aged between four and six years. Both were due to injuries by motor cars.

Kindergarten Training College Scholarships

The two girls who gained the first scholarships given by the City Council for the Kindergarten Training College are now through their course and are expected to act as assistants in two of the City kindergartens. There are two more girls still in training.

Dental Work in Health Centres

Excellent work is being done by Mr. Reeve in the two Centres which have facilities for dental care. Arrangements are being made for a third Centre (in North Melbourne) to have similar facilities, where stress will be laid more particularly on modern methods of caries prevention.

Lectures in Mothercraft

Lectures have not been given by our staff this year but these lectures have been given as part of the duties of a full-time lecturing Sister connected with the Maternal and Child Welfare Branch of the Public Health Department.

Milk and Accessory Foods supplied through the Centres to people needing aid

The figures given in brackets in the following records show comparative figures for 1948.

The amount of wet milk supplied was 442 pints, (639) to three tubercular patients. The amount of dried milk distributed was 11,657 lbs. (20,753). Thirty-six gallons (69) of an iron and vitamin mixture were distributed.

The total number of recipients was 327 (505), belonging to 284 (465) families. Fifty-one individuals (77), belonging to 43 (62) families, received help continuously throughout the year.

The assessment basis introduced in November, 1947, was continued, no free milk being given except in urgent cases, 6d. or 1/- being paid per tin according to the assessment.

The State Government's free milk scheme, which operated from 1/4/49 to 31/8/49, reduced the dried milk distributed, especially to children over one year.

Training Courses

Eight Sisters doing their Infant Welfare Course at the Presbyterian Babies' Home attended our Centres for instruction and practice in the Centre work required for their course.

TABLE SHOWING VOLUME OF HEALTH CENTRE WORK

	Council Centres		Training Centres (V.B.H.C. & Tandarra)		Total	
	1948	1949	1948	1949	1948	1949
No. of new babies attending	1,481	1,431	473	439	1,954	1,870
No. of individual babies under 1 year attending	1,411	1,443	450	439	1,861	1,882
No. of individual babies between 1 and 2 years attending	1,521	1,355	198	190	1,719	1,545
Total number of individuals under 2 years	2,932	2,798	648	629	3,580	3,427
Total attendances of babies under 2 years	32,866	29,636	6,042	5,947	38,908	35,583
No. of new expectant mothers	214	252	49	46	263	298
No. of individual expectant mothers	245	265	51	54	296	319
Total consultations with expectant mothers	596	566	150	114	746	680
Visits by nurses to babies and mothers	4,974	4,665	1,144	1,449	6,118	6,114
No. of times babies referred to doctor or hospital	486	360	154	203	640	563
No. of children new to pre-school sessions	904	821	265	156	1,169	977
No. of individual pre-school children	2,021	2,007	161	199	2,182	2,206
Total attendances of pre-school children	7,663	7,275	687	627	8,350	7,902
Visits (or consultations apart from sessions) re pre-school children	2,650	2,449	151	110	2,801	2,559
No. referred to Dental Hospital	228	131	6	7	234	138
No. of pre-school children examined in their own kindergartens	—	—	—	—	276	250

Births

The number of births notified in 1949 was 1,790, very close to the number in 1948, viz., 1,786. An analysis of the birth notifications showed that roughly 84% of the babies had parents who were both Australian born, 5.2% had British parents born outside Australia and approximately 10.8% had parents, one or both of whom were not of British birth. Approximately 7% of the births were ex-nuptial.

Maternal Mortality

Four maternal deaths connected with pregnancy were notified as follows:—

- Heart failure during anaesthesia at child birth—aged 32, married, home duties.
- Infection following self abortion—aged 28, married, factory worker.
- Pulmonary Embolus, toxæmia of pregnancy—aged 42, married, home duties.
- Ruptured tubal pregnancy—aged 27, married, home duties.

Infant Mortality

The number of births notified during the year was 1,790, which included 18 sets of twins. The number of infant deaths notified was 33, 24 of which were neonatal (i.e., occurred in the first month). The infantile death rate, after certain allocations, was computed by the Government Statist to be 18.99, the neonatal rate being 13.9 and the rate of those between one month and one year 5.03.

The following table shows comparison with the last five years:—

Year	Neonatal Death Rate	Rate between one month and one year	Rate of all under one year	No. of Births
1944	19.9	12.1	32.0	1,655
1945	19.8	6.4	26.3	1,709
1946	17.7	5.4	23.1	2,033
1947	21.9	13.7	35.7	1,961
1948	15.1	10.1	25.2	1,786
Average for 5 years	18.9	9.5	28.4	1,829
1949	13.9	5.0	18.9	1,790

Neonatal Deaths

The causes of the 24 neonatal deaths were:—

Prematurity	2	Atelectasis	2
Prematurity and atelectasis	8	Erythroblastosis	2
Prematurity and bronchopneumonia	1	Cerebral haemorrhage	4
Prematurity and sclerema neonatorum	1	Bronchopneumonia	2
		Congenital abnormality of heart	2

Of the 24 babies who died in the neonatal period, there were three of whom no details could be obtained apart from the place of birth. In one of these cases the mother came from the country and could not be located after discharge from hospital, and in the other two cases the births were ex-nuptial and the mothers could not be located. Of the remaining 21 there was a history of regular antenatal attention in 20, either by public hospital or by private doctor. In all cases the fathers were working. Diet appeared to be satisfactory in all but one case. Seven were first children, 6 were second children, 4 were third children, and 4 belonged to families of 4 and more children. Two of the deaths were in residents of Camp Pell State Housing Area. Nine were born in The Women's Hospital, seven in the Queen Victoria Hospital, and eight in private hospitals.

Deaths between one month and one year of age

The causes of nine deaths at this age were as follows:—

Gastroenteritis	1	Fibrocystic disease of pancreas	
Intestinal and hepatic toxæmia	1	and whooping cough	1
Prematurity, exhaustion and bronchopneumonia	1	Influenzal meningitis	1
Fibrocystic disease of pancreas		Congenital heart disease	1
and bronchopneumonia	1	Acute myocarditis	1
		Renal hypoplasia	1

Only one of these (the intestinal and hepatic toxæmia case) was a regular Centre attendant. Its progress was satisfactory. The illness was of sudden onset and the child died after two days. Five of the babies attended Centre soon after birth, but were referred almost immediately for investigation and treatment to their own doctor or the Children's Hospital. These included the cases of renal hypoplasia, fibrocystic disease of pancreas (2), congenital heart disease, gastroenteritis. The case of prematurity, exhaustion and bronchopneumonia was not known to the Centres at all, as the mother had come from the country. The case of acute myocarditis, which did not attend a Centre had been home visited, but found to have a private doctor and private nurse in attendance. The case of influenzal meningitis had attended the Centre a few times soon after birth and had been home visited and was apparently satisfactory. Onset of illness and death in this case was sudden.

Deaths in Children between one and two years of age

The causes of the eight deaths at this age were:—

Bronchopneumonia and debility	1	Mastoiditis and mastoidectomy	1
Bronchopneumonia and acute		Meningococcal septicaemia	3
myocarditis	1	Acute infected dermatitis and	
Otitis media	1	eczema	1

Deaths in Children between two and six years of age

The causes of the seven deaths at this age were:—

Fibrocystic disease and broncho-		Rheumatic carditis and pneumonia	1
pneumonia	1	Cerebellar tumour	1
Leukaemia	2	Accidental injury by car	2

Four of these children (the two accident cases, the cerebellar tumour and the fibrocystic pancreatic disease) were not known to the Centres. Of the three who had attended a Centre two had moved and could not be located and the other (one of the leukaemia cases) was under medical attention.

ACKNOWLEDGMENTS

I would like to congratulate Dr. Bull on her recovery and her return to duty and to thank her once more for her care of the children at the Pigdon Street Centre.

It is a pleasure, also, to express, as usual, my keen appreciation of the high standard of the special work done by the Health Centre Sisters and to sincerely thank the voluntary helpers for their generous aid.

HILDA E. KINCAID, D.Sc., M.B., B.S.

INFECTIOUS DISEASES

Health. Department,
Town Hall Chambers, Melbourne.
24th May, 1950.

The Medical Officer of Health:
Sir,

I have the honour to submit a report on the incidence and control of infectious diseases in the City of Melbourne for the year 1949.

The position with regard to infectious diseases was on the whole good, marred only by the widespread epidemic of poliomyelitis, in which the population of the City of Melbourne shared, but to a lesser extent than in 1937.

There were one or two sporadic prevalences of diphtheria, and again we undoubtedly had more cases because we looked for them. Many were very mild and might have escaped notice unless the contacts of definite cases had been swabbed. Six families accounted for eighteen cases, and others were discovered only when contacts with few or no symptoms were found to be harbouring the germ. It is not easy to draw the line between "carrier" and "case" and where there was any sign of malaise, the patient was treated as a case and sent to hospital.

Cerebro-spinal meningitis was more prevalent than it has been for five years and accounted for three out of the five deaths due to infectious disease, the other two being one from diphtheria and one from poliomyelitis.

DIPHTHERIA

TABLE I

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Fatality per 100,000
1915-1924 (average)	373	355	14	3.7	13
*1925-1934 (average)	230	239	6	2.9	7
1935-1939 (average)	168	178	3	1.8	3
1940-1944 (average)	102	106	3	2.9	3
1945	35	34	1	2.8	1
1946	34	32	2	5.8	2
1947	21	21	—	—	—
1948	44	43	2	4.5	1.9
1949	41	40	1	2.5	0.9

* Immunisation commenced in City.

The above table illustrates well the prolonged and consistent fall in the number of cases of diphtheria.

Incidence

Of the 41 cases 20 were in males and 21 in females.

Deaths

There was one death from diphtheria, of a woman aged 63. She was found dead in a lodging house and the Government Pathologist reported that death was due to diphtheria.

Rates

The case rate per 100,000 was 40. The average rate for the adjoining municipalities was a little lower than that for the City, 37.3. To illustrate the sporadic nature of the outbreaks the attack rates in these nine municipalities varied from 16 to 253 per 100,000.

The rates per 100,000 for the City, the nine adjacent municipalities, Greater Melbourne, and the whole State are shown in Table II.

TABLE II

	1949
Melbourne City	40
Nine adjacent Municipalities	37
Greater Melbourne	24
Whole State	19

Incidence

The age incidence is shown in Table III.

TABLE III

Age Incidence

Age	Males	Females	Totals	Percentages
0-4 years	5	7	12	29.3
5-9 years	10	8	18	43.9
10-14 years	5	3	8	19.5
15 years and over	—	3	3	7.3

TABLE IV

Institutional and General Cases			
Year	Total	Institutional	General
1931-1935	280	44	236
1936-1940	136	28	108
1941	235	15	220
1942	56	12	44
1943	48	21	27
1944	71	11	60
1945	35	3	32
1946	34	7	27
1947	21	5	16
1948	44	2	42
1949	34	2	32

Institutional Cases

Only two institutional cases occurred in 1949, one at a hospital and one at an institution for children. Six cases occurred among the children in the emergency housing areas, who not being residents, are less likely to have been immunized. Both the State and City Health Departments are urging these people to be immunized but the response is not as good as it should be, and new people are constantly being drafted into the camps.

The decrease in institutional cases, shown by Table IV, in which they are seen to be 17 per cent. of the total, in the 10 years from 1931 to 1940, can probably be accounted for not only by our own immunization campaign but to the great increase in the amount of immunization done in the other municipalities.

This is well illustrated by the results of tests done in the preliminary training schools at the various hospitals. As an index of what is taking place in the community it is of considerable value. In the early years very few girls had been immunized before taking up training. In the years 1931-5 there were 40 cases of diphtheria among the nursing staffs of three hospitals, the majority being in a hospital for children. Of 2,000 nurses tested between 1932 and 1940, 60 per cent. showed a positive reaction to the Schick test but in the last five years the Schick reactors have dropped to 36 per cent., and there have been no cases of diphtheria among the nursing staffs. Frequently a class of 20-30 will show only four or five reactors, all the rest having been immunized at school.

The high percentage of reactors among unimmunized young women has always been something of a puzzle. In analysing over 4,000 cards of primary Schick tests, it was found that immunity increased from the first year so rapidly that at 14 years 78 per cent. of the girls and 82 per cent. of the boys had become immune (B.M.A. Congress, Hobart, 1934—paper by H.W.B.). Yet at 18-20 years of age over 60 per cent. of girls seeking training as nurses were susceptible to diphtheria. This fact, added to the high rates both of tuberculosis and scarlet fever in girls of this age led one to wonder whether puberty and adolescence had some effect in lowering the resistance of the maturing female. Dr. Karen Helms noticed a similar trend in her account of the epidemic of poliomyelitis in Sydney, 1937-38. The preponderance of male cases in the early years does not as a rule persist, and indeed, in the later years more females than males get the disease. Figures released by the State Department for the 1949 epidemic of poliomyelitis show that males account for 60 per cent. of cases under 14, but only 42 per cent. from the age of 15 and onwards.

In our institutions, although protective measures are kept up, there is always a chance that a case from another suburb may occur, but with the spread of immunization these cases are becoming very few.

Diphtheria in families

Eighteen cases occurred in six families, four in two families, three in two families and two in two families. Several of the cases were discovered during routine swabbing, and none of the children in these families had been immunized.

Diphtheria in immunized children

Four children between the ages of 8 and 11, who were said to have been immunized in infancy, developed mild cases of diphtheria and one became a carrier. One of these was shown by the Schick test to be very sensitive, but failed to return for his second dose, and another who had been immunized only a few weeks previously in an emergency housing area contracted a mild illness.

The child, who was probably a carrier, had been immunized, and two children who had two doses of A.P.T. were reported as cases. None of the immunized cases was severe; in fact, the majority had few clinical symptoms, if any, and the diagnosis was made by the swab results. The results of immunization on the whole are very good, but we shall welcome the general use of the new material P.T.A.P., which is said to be even more efficacious than A.P.T.

Swabs

157 swabs were taken during the year from contacts of reported cases of diphtheria. 144 did not show the presence of the diphtheria organism, while of 13 in which the organism was present, eight were of the gravis type and three of the mitis type.

Immunization in Health Centres

The total number of children attending the Council Centres for immunization, 1,248, is fairly satisfactory compared with the number of individual babies, under 12 months, 1,440, at these Centres. The attendances were affected by the warnings against taking children into crowded places during the latter half of the year during the epidemic of poliomyelitis. With the opportunities for treatment at Health Centres during infancy and re-testing and the giving of reinforcing doses at entrance to kindergartens and schools, most children should be adequately protected against diphtheria. The figures are given in Table IV.

TABLE V
Immunization of Pre-School Children against Diphtheria

Year	Total Individuals	Immunised	
		1 Dose	2 Doses
1945	1,224	74	864
1946	1,683	72	853
1947	1,772	102	1,001
1948	1,304	118	808
1949	1,248	88	1,098

TABLE VI
Immunization against Diphtheria

Health Centres	Total Presenting	Immunised	
		1 Dose	2 Doses
Swanston Street	255	21	231
Abbotsford Street	155	6	124
Fawkner Park	67	5	54
Kensington	235	14	216
Newry Street	228	11	216
Pigdon Street	92	5	82
North Melbourne Town Hall	216	26	175
Total	1,248	88	1,098

Hospitals and Institutions

Children's Welfare Department	263	23	102
Royal Melbourne Hospital	180	—	48
Alfred Hospital	71	—	24
Children's Hospital	81	—	19
Deaf and Dumb School	161	4	64
Blind Institute	7	1	4
Total	763	28	261

Schools

Holy Rosary School	165	4	31
State School, Flemington	150	6	34
St. Brendan's School	167	1	53
State School, Faraday Street	104	2	20
State School, Pigdon Street	124	6	23
State School, Yarra Park	115	8	48
State School, King Street	153	18	39
State School, Errol Street	219	8	49
State School, Rathdown Street	143	8	22
State School, Lee Street	347	15	83
St. Mark's School	61	—	15
St. George's School	74	2	7
State School, Boundary Road	78	4	119
St. Mary's School	132	14	40
St. Michael's School	111	6	19
State School, Punt Road	208	3	92
State School, Kensington	361	7	97
Christ Church Kindergarten	53	3	11
Total	2,765	115	802
Grand Total	4,776	237	2,161

Re-Tests

During the year a number of children who had been immunized in infancy, were re-tested when the schools were visited. Not all had completed the treatment but we may regard the information about previous immunization as supplied by the parents on the consent forms to be substantially correct. Of 1,269 children whose parents said they had been immunized previously, 1,202, i.e., 95%, showed no reaction to the Schick Test, and may be said to have been successfully immunized.

COMBINED PROPHYLACTIC AGAINST DIPHTHERIA AND PERTUSSIS

A combined prophylactic against diphtheria and whooping cough has been in use since 1945, and a brief account was given in the Annual Report for 1947. It was continued during 1948 at a large institution for children and in 1949, during my absence, Dr. Adey, of the Commonwealth Serum Laboratories, undertook the work.

He had developed a new prophylactic which needed only three doses at monthly intervals, and was antigenically more powerful than the original preparation.

It is very desirable that the number of injections given to small babies should be as few as possible, and the substitution of three doses of a combined prophylactic for the six or seven separate doses required to give a satisfactory protection against the two diseases would be a great improvement on present methods.

Dr. Sheila Hyland, who was taking the immunization sessions during my absence presented a very detailed account of her experience with the new prophylactic, and on the whole regarded it as satisfactory in respect to mildness of the reactions experienced. Three cases caused some concern, because one of these children developed tonsillitis and the other two German measles, and the mothers were apprehensive of further treatment. Such coincidental troubles are inevitable in these situations, but, apart from some local reaction, none of the other children appeared to be upset in any way. Further trial of the material was postponed on the advice of the Consultative Committee on Poliomyelitis but will be resumed as soon as possible.

This is only one instance of the long and fruitful co-operation with Dr. Charles Adey and the Commonwealth Serum Laboratories, and his loss is sincerely lamented and deeply felt by those of us who had the privilege of working with him. The field work for the trial of many of his preparations was done in collaboration with our department and was of great mutual interest and benefit.

SCARLET FEVER

Scarlet Fever still shows a very low prevalence and the new methods of treatment have transformed it from a disease which could be very severe, especially in its complications, to one which is easy to treat and control. The period of hospitalization has been very much reduced and also the necessity for prolonged quarantine. The high incidence during the war years (1938-44), Table I, was not sustained and dropped sharply in 1945. Whether the vigorous onslaught of anti-biotics is producing an attenuated strain of streptococcus is a matter for speculation; but because of the tendency of organisms to become resistant to these substances, there is still need for care in the supervision and treatment of these diseases.

TABLE I

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Deaths per 100,000
1933-1937 (average)	85	91	0.2	0.2	0.2
1938-1942 (average)	233	247	0.6	0.2	0.6
1943	285	287	2	0.7	2
1944	229	228	—	—	—
1945	76	75	1	1.3	1
1946	91	86	—	—	—
1947	59	59	—	—	—
1948	40	39	—	—	—
1949	31	30	—	—	—

There were 31 cases of Scarlet Fever in 1949, the lowest number yet recorded. Eleven were in males and 20 in females. There were no deaths.

AGE INCIDENCE OF SCARLET FEVER

TABLE II

Age	Males	Females	Totals	Percentages
0-4 years	5	7	12	39
5-9 years	3	4	7	23
10-14 years	—	3	3	10
15 years and over	3	6	9	28
	11	20	31	

Incidence

There is again a shift in incidence to the earlier years which has been noticed for the last three years. The preponderance of females, which is usually a marked feature in adolescence, is maintained at all age groups.

Swabs

Thirty-eight swabs were taken from persons in contact with cases of Scarlet Fever. Twenty-three showed the presence of haemolytic streptococci, Group A, and 15 were free of the infection.

Scarlet Fever in Institutions

There were three cases of Scarlet Fever in institutions and four in emergency housing areas.

CEREBRO-SPINAL MENINGITIS

The occurrence of 11 cases of cerebro-spinal meningitis with three deaths suggests that the disease was more active than it has been for several years. In addition, it was observed that some of the cases were very severe.

During the war years, 1941-45, there were 104 cases with 25 deaths, but in the last four years the incidence has dropped sharply. In 1946 there were five cases with no deaths; in 1947, six cases with no deaths; in 1948, only one case; so that the 1949 figures of 11 cases with three deaths is the highest since 1945, when there were 10 cases with two deaths.

Incidence

There were 11 cases of cerebro-spinal meningitis, nine in males and two in females. A preponderance of males is usual in the disease.

The age incidence of the cases was as follows:—

CEREBRO-SPINAL MENINGITIS

Age	No. of Cases	Number of Deaths
0-4 years	9	3
5-9 years	1	—
10-14 years	1	—

The impact of the disease on infants, which is the normal endemic picture, is well illustrated. In the epidemic years there was a heavy toll of young adults.

Deaths from Cerebro-Spinal Meningitis

There were three deaths from cerebro-spinal meningitis all in infants under two years of age, a very high percentage in these days, when the newer methods of treatment have reduced the mortality to a fraction of what it was 20, or perhaps even 10, years ago.

Two of the deaths were in females and were of the fulminating type. Death occurred in each case within 24 hours of the parents' seeking medical attention, and indeed before the diagnosis had been confirmed, and appropriate treatment given. The other child, a boy aged nineteen months, died at the Children's Hospital very soon after admittance. It seems that the type of infection in 1949 was very severe. The value of the new anti-biotics was demonstrated in several cases which only narrowly escaped a fatal termination.

POLIOMYELITIS

Since the epidemic of poliomyelitis in 1937-38, when there were 174 cases with 12 deaths, there has been very little poliomyelitis in the City of Melbourne. Even in 1945, when there was a general prevalence throughout the State, there were only three cases in the City, and in 1947 there were five. In the 10 years from 1939-1948, only 13 cases with one death occurred in the City area. In 1949, however, the City shared in the most severe epidemic experienced in Victoria for 12 years, but whereas in 1937 our municipality showed a much higher incidence than all except one of the adjacent municipalities, and a rate well above the metropolitan average, in 1949 the rate is very little higher than that of the combined adjacent municipalities, being fifth on the list, and is slightly below that of the metropolitan area as a whole.

Incidence

There were 36 definite cases of poliomyelitis, 24 in males and 12 in females. Four of the cases, all in males, showed no paralysis, but were reported clinically as cases of poliomyelitis.

TABLE I
Poliomyelitis — Age Incidence

Age	Male	Female	Total	Deaths	Percentages	
					City	Metropolitan Area
0-4 years	13	5	18	—	50	34
5-9 years	3	2	5	—	14	26
10-14 years	4	—	4	—	11	10
15 and over	4	5	9	1	25	30
Total	24	12	36			

It will be seen by the above table that 50% of the City cases occurred in the first five years of life. In the metropolitan area as a whole 34% occurred in the first five years, and 26 in the second. In 1937 we found that the peak of incidence was four and a half years for the City, and two years later for the outer suburbs.

Rates per 100,000

The rate per 100,000 for the City was 35, for the combined nine adjacent municipalities 32, for the metropolitan area 39, and for the whole State 31.5. The rates in the adjacent municipalities varied from 16 to 70 and there was no indication, as there had been in the last epidemic, that the poorer and more crowded sections of the population suffered more severely.

Deaths from Poliomyelitis

There was only one death, that of a man of 19 years of age. He was a respirator case and died in hospital after five weeks' illness. Two other respirator cases who were desperately ill are improving.

Signs and Symptoms

In 1937 we recorded the percentage occurrence of certain pathognomonic signs and symptoms, and it may be of interest to compare those in the present epidemic. Owing to my absence through illness I was unable this time to visit all the cases until later in the year, so that the records will rather understate the frequency of symptoms as many would be forgotten: but the general trends seem to be similar.

TABLE II
Signs and Symptoms (percentage occurrence)

	1937	1949
Fever	91	72
Drowsiness	65	81
Headache	60	34
Nausea and Vomiting	64	65
Anorexia	66	75
Pain in the back and neck	81	62
Muscle pain and Hyperaesthesia	29	50
Tremor	34	34
Disturbance of Micturition	5	12
Constipation	17	44
Vocal symptoms and Diaphagia	12	31
Diplopia and Squint	5	12
Paralysis in early stage	46	77
Dromedary type	36	40
Flush	30	50
Rapid Pulse	13	28
Throat red or sore	15	40
Delirium	—	6

Mode of Spread

As I was not able to make epidemiological investigations at the time, we have no very useful indications as to sources of infection and mode of spread. The cases in Camp Pell were often more or less in contact, and many shared the same milk and ice cream vendors, but there was no definite evidence of case to case infection. There were histories of probable contacts in one or two cases, but not definite enough to say that there was case to case infection.

In five cases there was a history of illness in domestic animals within a few weeks of the beginning of illness in the child. Four were definite cases of distemper in dogs of which two died, and the other appeared to be distemper but was not diagnosed definitely. In three cases there was contact with ferrets; but they were not sick. In view of the susceptibility of ferrets to the influenza virus, it seemed a possibility that they might harbour the poliomyelitis virus; but no evidence of illness was obtained.

There were very few histories of illness in contacts, and in only two cases did it even appear likely that the mild upset was likely to be due to the virus.

With intensive inquiries over a wide number of cases, as was reported in the admirable survey by Dr. Southcott, *et alia* in South Australia, no doubt more definite evidence of case to case infection and unrecognised intermediaries between cases would be obtained; but this information was not available to us at the time.

Length of stay in Hospital

Under 2 weeks	11
Between 2-4 weeks	10
1 to 3 months	5
Over 3 months	3
Not in hospital	7
	—
	36
	—

That 20 out of the 36 cases should have left hospital in less than four weeks shows that the cases were, on the whole, mild, especially in the younger children. The really severe cases were all in young adults.

Notification

In addition to the 36 cases notified from Fairfield or other sources, and accepted by the Public Health Department, 10 cases were sent to hospital as "suspected poliomyelitis," but the diagnosis was not confirmed. On inquiry it appeared that most of these had shown signs and symptoms in the early stages suggestive of poliomyelitis, but did not develop paralysis. How many of these were "abortive," or more properly "non-paralytic," cases it is impossible to say; but the fact that four non-paralytic cases in our area were notified as poliomyelitis makes it difficult to know where the line is to be drawn. It is suggested that only cases that show paralysis at some stage should be notified as cases of poliomyelitis, and that those who show unmistakable signs such as cell-increase in cerebrospinal fluid and definite back and neck stiffness should be notified as non-paralytic poliomyelitis. In order to assist epidemiological inquiry, the large number of cases showing symptoms suggestive of the disease, which we called "abortive" in 1937, should also be notified as such. They undoubtedly supply many links in the chain of infection between cases, and such a system would give a better over-all picture of the behaviour of the virus in the community.

POLIOMYELITIS AND CO-INCIDENT INJECTIONS

During the later half of the year the State Health Department issued a confidential memo to all medical practitioners, informing them that there appeared to be some connection between the giving of injections, particularly of the pertussis vaccine, and the subsequent development of poliomyelitis. The limb paralysed was said, in many cases, to coincide with the site of the last injection.

In the City, three cases of poliomyelitis occurred after injections had been given. The details are as follows:—

(1) Simultaneous, not combined, toxoid and pertussis injections

R.C. Aged 17 months. Records from hospital give the following particulars:

Pertussis injections—5th April, 0.75; 12th April, 1.25 c.c.; 19th April, 2 c.c.; 24th April, 2 c.c.; 3rd May, 2 c.c.

Toxoid injections—0.5 c.c. on 5th April, 1 c.c. on 24th April. On 19th April, reported with temperature of 100 degrees and vomiting, but condition was diagnosed as "dietary."

On 8th May, reported with history of anorexia, fever and vomiting on and off since 26th April, and that on 5th May, weakness of the legs was noticed. He was sent that day to the Infectious Diseases Hospital with diagnosis of poliomyelitis.

The parents reported that there were at least two injections in the left leg; but there is no accurate report of order and site of injections.

Apparently all four limbs were used.

(2) Pertussis injections only

H.M. Aged three years and five months. The hospital reports as follows:

Pertussis injections—On 12th March, 0.75 c.c.; on 19th March, 1.25 c.c.; on 26th March, 2 c.c.; on the 2nd April, 2 c.c.; and on 9th April, 2 c.c.

On 8th April child reported with history of vomiting three days previously, also fever, and weakness of right arm. Examination showed neck stiffness and paralysis of right arm, and she was sent to the Infectious Diseases Hospital.

There is no record of successive sites of injection.

(3) Alum precipitated toxoid only used as injection

J.A. Aged one year.

This child received subcutaneous injections of 0.25 c.c. A.P.T. on 1st March, in the left arm, and 0.5 c.c. A.P.T. on 5th April, in the right arm. There was a small local reaction after the second injection, quite within normal limits. On the 9th April there was anorexia. He was taken to hospital and diagnosed as acute tonsillitis. On 17th April weakness of right leg was noticed, and he was diagnosed as poliomyelitis and sent to Fairfield.

Present position of these three cases

R.C. — Weakness of both legs. Still in splints; but said to be recovering.

H.M. — Still some weakness of right arm.

J.A. — Disability very slight, recovering.

If these cases had been isolated, it is unlikely that any causal connection would have been postulated. R.C. and H.M. had made repeated visits to the Children's Hospital, and one would have been inclined to think that close contacts in the out-patients' department would have been the most probable source of infection, as it appeared to be in 1937. The occurrence of poliomyelitis in J.A., one among two thousand who received immunizing injections during the year, would also have been regarded with no more suspicion than attaches to the occasional coincident appearance of other virus diseases, e.g., measles, rubella, chicken-pox, mumps.

However, Dr. McCloskey's paper, with its careful analysis of 53 such cases occurring in Victoria, out of a total of 640 cases, compels an entirely different outlook, and is of outstanding interest and importance.

In order to see if any such connection existed in 1937, and was missed, our records of 174 cases of poliomyelitis, 163 of which were under 15 years of age, were re-examined.

It was found that no child had received an injection of toxoid less than a year before the onset of the disease, 23 children had received injections one to five years previously, and eight were primary Schick negatives.

The only regular pertussis inoculation during that year was carried out in an institution accommodating between two and three hundred children, where all children under four were inoculated on entry. No case of poliomyelitis occurred here during the whole epidemic, so there was no chance of establishing any connection.

At the Children's Hospital contacts of pertussis cases were being inoculated, but there was no history of such treatment in any of our cases.

The Statistical Clerk at the Children's Hospital very kindly had a very large number of old cards investigated for evidence of coincident injections in our 1937 series of 174 cases of poliomyelitis, but as far as could be found from the entries none had received any injection either against pertussis or diphtheria during the course of the epidemic.

The giving of massive doses of pertussis vaccine, as recommended by the American authorities, has never been carried out in our clinics, because of the reactions that often follow. It is not impossible to imagine that a child, struggling to produce an immunity against the poliomyelitis virus, should have the scales tipped against it by another assault on its resistance mechanisms. Both from the point of view of local trauma, and interference or blocking in the reticulo-endothelial system, large doses of pertussis vaccine might be a factor in determining the outcome of the infection, but why a particular site should be involved is more obscure. If it were due chiefly to trauma, similar results would be expected among all the hundreds of minor and major injuries and accidents and operations that were going on at the same time, and which would involve much more extensive damage to muscle tissue.

Meanwhile, Dr. McCloskey's work has opened up a vast field of inquiry, and the results will be awaited with great interest.

Method of injection

Most explanations of the occurrence of paralysis in children who have recently had prophylactic injections seem to favour the theory that it is connected in some way with trauma of the muscle. In the one case in our series which occurred after diphtheria immunization the injection was subcutaneous, and, of course, the subsequent paralysis was in the leg, not the arm, which was the site of the injection. All the injections given by medical officers of this department, whether for diphtheria or pertussis have been subcutaneous, as, in consultation with the staff of the Commonwealth Serum Laboratories we had decided that serious reactions were less likely with subcutaneous than with intramuscular injections. It would be interesting to have precise data of the method of injections in all the coincident cases of paralysis.

Results

As stated previously four reported cases showed no paralysis at any time during this illness, but were regarded clinically as being poliomyelitis. Of the other 32, 12 have achieved complete recovery, nine show slight disability which is improving, and in 10 cases there is moderate to severe disability. Two cases were still in the respirator at the end of the year, but have since been discharged from hospital. The results may be summarized as follows:—

Non-paralytic	4
Complete recovery	10
Slight disability	11
Moderate or severe disability	10
Died	1
	—
	36
	—

TUBERCULOSIS

The figures in this section have been supplied by Miss Roberts, Health Visitor, who, acting in close co-operation with the Tuberculosis Bureau of the State Department of Health, visits and keeps in close touch with all cases of tuberculosis in the City.

The number of cases under supervision during the year and the number of deaths are about the same as they have been since 1945, when the higher incidence noticed during the war years began to revert to earlier and lower figures. Considering the active interest taken in the disease, and the greater facilities for diagnosis, especially by mass micro-radiography, it probably indicates that there is no real increase in cases, and indeed, probably, a fall as compared with earlier years.

Number under supervision

The total number of cases under supervision during the year (inclusive of cases notified after death and repatriation cases) was 537. In 1948 the figure was 521; in 1947, 531; in 1946, 521; and in 1945, 526, so that the number has remained remarkably constant for the last five years.

New Cases

The number of new cases is significantly higher, and is probably related to the greater facility for diagnosis in the early stages of the disease, as was mentioned above.

119 new cases were notified to the Department, 72 male and 47 female. It must be remembered that "new" is applied to those patients who have come to live in the City only during the last year. The majority would have been known to the Bureau as living in other districts, and this figure of "new" cases fluctuates with the migration of more or fewer patients to the City in search of treatment. There was one non-pulmonary case among the new patients, a female with tubercular arthritis.

The number of new cases notified during the last ten years is shown in the following table:—

TABLE "A"				
		Male	Female	Total
1940	.....	116	54	170
1941	.....	87	63	150
1942	.....	103	57	160
1943	.....	101	50	151
1944	.....	88	61	149
1945	.....	42	26	68
1946	.....	45	42	87
1947	.....	36	35	71
1948	.....	72	24	96
1949	.....	72	47	119

The age and sex distribution of the new cases is shown in Table B.

TABLE "B"		
Age and Sex Distribution of New Cases		
Age in Years	Male	Female
0-4	2	—
5-9	1	3
10-14	—	—
15-24	6	18
25-34	11	8
35-44	5	7
45-54	17	5
55-64	20	2
65 and over	10	4
	72	47

The figure of 18 cases in females aged 15-24 illustrates the greater susceptibility of females of this age period.

Total Cases

The total number of cases under supervision including those who moved to another district, went to sanatorium or died during the year is shown in the following table:—

TABLE "C"					
		New Cases	Old Cases	Total	
		Male	Female	Male	Female
Pulmonary	.....	71	45	199	178
Non-pulmonary	.....	1	2	4	—
Pulmonary in Sanatoria	.....			21	16
Total	.....	72	47	224	194
During the year the following numbers left the district:					
Left Melbourne Area	.....		4	13	15
Died during 1949 (including cases notified after death):					1
Pulmonary	.....	26	5	21	3
Non-pulmonary	.....	1	1		
Total	.....	27	6	21	3
Died from other causes	.....			2	2
In Sanatoria at 31/12/49	.....	10	12	13	6
Total leaving City	.....	37	22	36	26
Totals left under supervision on 31/12/49		35	25	178	168



Exterior.

ROMAN CATHOLIC: Holy Rosary Kindergarten, Kensington.

Interior.





Exterior at Kensington.

PRESBYTERIAN.

Interior at North Melbourne.





CHURCH OF ENGLAND.
St. Mary's, North Melbourne. New Kindergarten in course of erection.

METHODIST.
Interior of Kindergarten, North Melbourne.





Exterior.

BAPTIST: Carlton Free Kindergarten (Mother of Kindergartens). Established 1901.

Interior.



The total numbers under supervision on the 31st December for each of the last 10 years is shown in the following tables:—

TABLE "D"

Year	Number of Cases	Year	Number of Cases
1940	311	1945	389
1941	308	1946	423
1942	350	1947	425
1943	393	1948	419
1944	430	1949	403

Cases admitted to Sanatoria

Nineteen males and 16 females were admitted to Sanatoria during the year, obviously a very inadequate number. The age and sex distribution of cases under supervision on the 31st December, 1949 (including sanatorium cases), is shown in the following table:—

TABLE "E"

Age	Male	Female	Total
0-4 years	5	—	5
5-9 „	6	6	12
10-14 „	2	2	4
15-19 „	9	14	23
20-24 „	19	24	43
25-30 „	42	59	101
35-44 „	42	59	101
45-54 „	54	30	84
55-64 „	37	14	51
65 and over	17	3	20
	233	211	444

The outstanding feature in this table is the much greater percentage of female cases throughout the whole child-bearing period—quite a serious state of affairs when the responsibilities of women in these days is considered.

Among 42 women patients between the ages of 15 and 44 who had families, there were 75 children. The ages of the mothers and the number of children is shown in the following table:—

Number of Children of Female Cases

Age	Mothers	Children
15-19 years	—	—
20-24 „	1	1
25-29 „	7	21
30-34 „	11	22
35-39 „	14	15
40-44 „	9	16
	42	75

Although it is only in the case of the younger mothers that there should be much risk, it is worth noting that these 75 young people have at some time been exposed to the infection in their own homes.

The number of male and female cases at the ages 15-44 for the last five years is shown in the following table:—

TABLE "F"

Year	Male	Female
1945	105	132
1946	102	151
1947	103	144
1948	106	142
1949	112	156
	528	725

At all other ages males show a very great preponderance over females.

Duration of illness

The length of time the cases under supervision have been known to the department, as a guide to the number of long chronic cases, is of some interest and is shown in the following table:—

TABLE "G"

Since the Year	Length of time known to Health Dept.	Since the Year	Length of time known to Health Dept.
1930	3	1940	14
1931	4	1941	19
1932	7	1942	36
1933	3	1943	25
1934	9	1944	28
1935	6	1945	26
1936	5	1946	47
1937	14	1947	43
1938	14	1948	50
1939	13	1949	82
		448	

Exposure of children to infection

In 25 males and 11 females the presence of the organism of tuberculosis was demonstrated in the sputum.

Twenty-two children lived in contact with known cases with positive sputum. Their ages were:—

0-4 years	7
5-9 "	9
10-14 "	6

Efforts have been made to protect these children as far as possible to keep them under supervision, and to send them for holidays when necessary; but the most important advance is the work recently inaugurated by the Tuberculosis section of the State Health Department. All these contacts are now seen at the Bureau, Mantoux tested, given B.C.G. and re-tested later. This work is in conformity with similar work being done successfully in other countries, and should be of great value in assisting in the prevention of tuberculosis.

Deaths from Tuberculosis

The number of deaths 57, 48 in males and 9 in females, is the lowest for 10 years, except 1948, when there were 47, and 1946, when there were 53.

TABLE "H"

	New Cases		Old Cases		Notified after Death		Total
	Male	Female	Male	Female	Male	Female	
Pulmonary	8	3	21	3	18	2	55
Non-pulmonary					1	1	2
							57

In addition, four known cases died during the year from causes other than tuberculosis:—

1. Male, aged 74. Chole-cystitis, hepatatis and renal failure.
2. Male, aged 67. Gun-shot wounds.
3. Female, aged 63. Cirrhosis of liver and chronic alcoholism.
4. Female, aged 58. Coronary thrombosis and myocarditis.

The age and sex distribution of cases who died is shown in the following table:—

TABLE "J"

Age	Males	Females	Total
0-4 years	—	—	—
5-9 "	—	—	—
10-14 "	—	—	—
15-19 "	—	—	—
20-24 "	1	—	1
25-34 "	2	1	3
35-44 "	8	3	11
45-54 "	9	1	10
55-64 "	17	—	17
65 and over	11	4	15
48		9	57

The number of female deaths is surprisingly low. It is always lower than that of males because of the increased tendency for the older males to die of tuberculosis, but in 1948 the figures were only 33 males to 14 females; in 1947, 46 males to 22 females, and in 1946, 36 males to 17 females, so that the female deaths were reduced proportionately in 1949.

OTHER DISEASES

Salmonella Gastro-enteritis

Four children were admitted to hospital with gastro-enteritis, and bacteriological examination showed the presence of Salmonella Derby.- Two were just under one year of age and two between 12 and 18 months old. All recovered.

Undulant Fever

There were two cases of undulant fever, both in adults, one in a woman aged 38, and the other in a man aged 29. Inquiries were made about milk supply and occupational risks, without any relevant facts emerging. In the case of the man, it was suggested by the hospital doctors that the original infection was in Rhodesia.

Measles and Whooping Cough

There was no undue prevalence of either of these diseases. There was one death from whooping cough in an infant with fibro-cystic disease of the pancreas, which has been reported by Dr. Kincaid.

Immunization against whooping cough was discontinued during my absence, except for about 40 cases attended by Dr. Adey at the Children's Welfare Department during the year, and 20 special cases attended by Dr. Hyland, who were all given combined prophylactic against diphtheria and whooping cough. The injections were not resumed later in the year because of the already mentioned memo from the State Health Department, advising against the procedure during the prevalence of poliomyelitis.

ACKNOWLEDGMENTS

I wish to acknowledge the help of Dr. John Dale and of Sister Dossetor, who had a heavy burden to carry during my absence. The Department is also indebted to Drs. MacNeil and Hyland, who carried on the immunization work for most of the year. The Health Centre Sisters, the head teachers and infant mistresses helped considerably in the immunization campaign, and we are very grateful.

HILDA W. BULL.

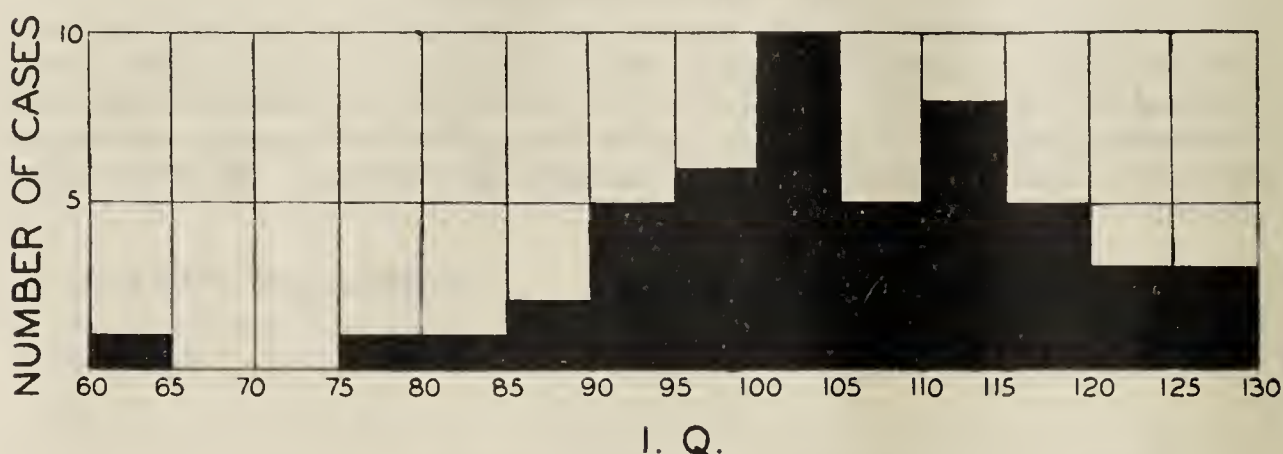
A NOTE ON THE PSYCHOLOGICAL EXAMINATION OF 50 PRE-SCHOOL CHILDREN

Owing to my absence in the first half of 1949, the psychological examination of the pre-school children attending the Nursery School at Pigdon Street had to be postponed until the latter half of the year. The following report is based on the records of 50 children who were on the roll on 1st July, 1949. The children who were the subject of the report in 1948 have all either passed from kindergarten to primary school or left the district.

The material includes intelligence tests (Terman-Merrill revision of Binet Simon Tests, Form L), interviews with parents and children, reports from Miss Jean Hamilton, the directress, and observation and discussion of the children's behaviour and activities in the Nursery School.

The 50 children consist of 32 boys and 18 girls, aged from three to five years. Though admission to the Nursery School at three years of age is regarded as a normal event in the progress of the child, our limited accommodation makes some method of selection necessary. We are assisted in our choice by a points system which takes into consideration the physical and psychological state of the child, the home conditions, including the health of the mother, the number of children in the family and other relevant circumstances. All the mothers help in the running of the school, and by their close co-operation with Miss Hamilton are able to discuss problems with her, and receive advice at any time. Physical examinations of the children and psychological consultations with the mother and child are also carried on at the Health Centre by myself and Sister Price, who is in charge of the Centre.

Results of Intelligence Tests



As will be seen by the above histogram the tests show normal distribution, slightly weighted in the higher values.

The mean I.Q. is 102.4 and standard deviation 13. In the previous sample of 96 children reported on in 1948 the mean I.Q. was 105, due to the presence of a few exceptionally bright children in the sample. The standard deviation was 13.

In this sample also there is a fairly wide scatter. The admission of the child with I.Q. 62 was suspended for further advice, as he was considered too backward to take his place satisfactorily among normal children.

Nineteen children were rated as "superior," I.Q. above 110.

Twenty-six children were rated as "average," 90-110.

Five were rated as "poor," I.Q. below 90.

Relationship of Education and Economic Status with I.Q. of Child

An interesting point that emerged from this inquiry was that the educational and economic status of the father was more closely related to the I.Q. of the child than was that of the mother. On the whole the father tended to be in a higher employment group than the mother, and this held also for educational qualifications. Needless to say, this is not to be regarded as showing any inherent inferiority in the female, but rather as an indication that women are still somewhat handicapped socially and economically, and that if opportunities have to be restricted in a family, for financial reasons, the girl usually gives way to the boy.

The details are as follows:—

<i>Education</i>				<i>Employment</i>			
		Father	Mother			Father	Mother*
Below Merit	.....	11	15	Unskilled	.....	9	26
Merit	.....	15	20	Skilled	.....	14	20
High School	.....	21	14	Business	.....	17	1
Higher Tech. or				Professional or semi-			
University	.....	3	1	professional	.....	10	2

*Employment of mothers usually based on pre-marital history.

From the above list it will be seen that 26 of the fathers and 35 of the mothers were in the two lower educational categories, and 23 of the fathers and 46 of the mothers in the lower employment categories.

Twenty-four fathers and 15 mothers had high school education or better, and 27 fathers and only three mothers were in the business or professional sections. Only five mothers were in higher educational or business categories than their husbands.

Children with I.Q. of below or above 100 are distributed as follows in relationship to the educational and occupational status of the father:—

<i>Education of Parent (Father)</i>		I.Q. below 100	I.Q. above 100
Below Merit		5	6
Merit		7	8
High School		4	17
University or Higher Tech.		—	3
<i>Occupation of Parent (Father)</i>			
Unskilled		4	5
Skilled		5	9
Business		7	10
Semi-professionals or professionals		—	10

It was also interesting to note that some of the parents in the higher employment categories had poor educational records, probably owing to lack of opportunity in the depression years, but had been able to overcome this early handicap by improving their employment ranking. This was usually reflected in the superior rating of their children.

Home Conditions

Conditions are becoming less crowded in this district, and many of the families who have been under our care for years have now moved to the outer suburbs.

In 22 cases the home conditions were regarded as adequate, including playing space, and separate bedrooms for one or two children; in 10 cases the conditions were only fair, and in 18 there was over-crowding. In 11 instances relatives living with the family were a more or less disturbing element. Eleven children slept in their parents' room.

BEHAVIOUR DISORDERS

The number of behaviour disorders among these children is again of interest. One may say that they are not serious, and would disappear as the child grows older; but most of them are symptoms of maladjustment, and require advice in the parent-child relationship and guidance in the Nursery School. Experience shows that the "disappearance" of the more serious type of disorder, unless it has been carefully handled, is often only a conversion into an attitude more appropriate to the age of the maturing child, but equally significant. The more common of the disorders complained of by parents and teachers are listed as follows:—

Habits—Thumb-sucking, nail-biting, rocking, head-banging, etc.	4
Physiological disturbances—Enuresis, vomiting, feeding problems	17
Aggression—Tantrums, spite, cruelty, hyperkinesis	12
Insecurity—Repression, shyness, mother attachment, jealousy	11
Speech backward—Stammering	6
Fears—Sleeplessness, night-terrors	6
Slowness and backwardness	6

Several children had physical disabilities which affected their behaviour and social adjustment. Two were in splints for a while with knock knees, one had non-paralytic poliomyelitis, another rheumatic fever, and several were subject to attacks of asthma.

Six children were left-handed.

The numbers are too small for a significant relationship to be established between I.Q. and the incidence of behaviour disorders, but it is of interest to note that the 16 children with an I.Q. below 100 had an average of two types of disorder per child; the 15 children of I.Q. between 100 and 109 just over one per child, and the 17 children with I.Q. over 110 approximately 0.8 per child. These results are practically the same as we found previously, i.e., that behaviour disorders occur more frequently in the groups with lower I.Q.

The type of problem in relation to I.Q. is interesting, the children with the higher I.Q. tending to the more flamboyant and aggressive type of behaviour, with tantrums, hyperkinesis, and night-terrors; those with lower I.Q. to repression, whining, mother attachment, feeding troubles, poor speech and enuresis, though there is no hard and fast rule, so much depending on the handling of the child and its social milieu.

Psycho-neurotic or psychotic history in relatives

Many parents attribute their children's difficulties to the fact that they "take after" one or other of the parents who may be more or less neurotic, or relatives who have a psycho-neurotic or psychotic history. It is often necessary to reassure them about this "pseudo-heredity," as Professor Blain called it recently, and to help them to establish a relationship where the child does not have these artificially imposed attitudes confirmed and strengthened by the parents' fatalistic approach. Among our 50 children there were 15 cases of fairly definite neurotic conditions in the parents, several being due to war-neurosis.

In four cases there had been psychotic episodes in near relatives with institutional treatment; in one case there was petit mal, and in another epilepsy in the parents' siblings. In many cases the children had grown up in an atmosphere of emotional tension and were suffering from the effects. Fortunately, it was often possible to persuade the parents to face their situations and problems, and to show them what the effect was likely to be on the children. In successful cases the results were sufficiently remarkable to be a source of satisfaction to the parents; but in other cases, where lack of time and co-operation made it impossible to do much with the parents, one had to concentrate on neutralising the bad home atmosphere by sympathetic and stimulating treatment at school.

Follow-up of children previously seen

An attempt was made to initiate a longitudinal study of the children who were the subject of the 1947 report and have passed from Nursery to Primary School. Only 60 were traced, the majority of the rest having left the district, and although it is too soon for any marked differences to be manifest, the tendency for the children judged as bright in the Nursery School to forge ahead of their classmates is quite well-marked. Of the 20 children with I.Q. of over 110, only one was slightly above the standard age for the grade, four were about equal, five were about six months, and 10 were 6-10 months younger than the average age for the grade. Of 23 children of I.Q. between 100 and 109, nine were well under the average age, seven were equal, and seven were slightly below. Of the group of 17 children whose I.Q. was under 100, eight were above the age for the group, six were equal, and only two were under the average age. It was impossible to obtain information on all factors, but the reports indicated that the progress of the children in the primary schools was very much what would have been expected from their previous history. Illness and non-attendance account for some of the anomalies.

In discussion with Miss Hamilton she pointed out that children who later on were reported to have found difficulty in learning to write were often those who had preferred group activity and had had less interest in individual manipulative efforts when attending the Nursery School. It suggested to her that those whose handwork was weak might need more help and encouragement in that direction.

We are indebted to Miss Jean Hamilton, the Directress, for her continued co-operation and enthusiasm, and to Sister Price, who is in charge of the Health Centre.

The Mothers' Club, under the presidency of Mrs. Alan Murray, has worked very hard, and has successfully raised a good deal of money for extra equipment. Their enthusiasm is very encouraging to the staff.

HILDA W. BULL.

Report of the Chief Health Inspector

Health Department,
Town Hall Chambers, Melbourne.
7th February, 1950.

The Medical Officer of Health:

Sir,

I have the honour to submit a report for the year 1949 upon the varied activities of the Department, which are governed by the provisions of the following Acts and Regulations.

ACTS AND REGULATIONS

Acts

Health Acts, Slum Reclamation and Housing Acts, Local Government Act, Factories Acts, Police Offences Acts, Melbourne and Geelong Corporation Act, Goods Act, Births Notification Acts, Sale of Horseflesh Act.

Regulations under Health Act

Registration, Rat Destruction, Hairdressers' Shops, Offensive Trades, Seizure (Claims), Eating House, Camping, General Sanitary, Analysis, Septic Tanks, Cattle Sale Yards, Infectious Diseases, Cleanliness (Food), Food and Drug Standards, Nightsoil, Smoke Abatement, Tobacco Packages, Stream Pollution, Fire Prevention, Building (Tent), Boarding and Lodging House.

Other Regulations

Housing (Standard of Habitation) Regulations. Regulations under the Goods Act.

By-laws and Regulations

By-laws and Regulations of the Council relating to Places of Amusement, Public Buildings, Dancing Saloons, Fowl Yards, Stables, etc., are also administered by the Department.

HOUSING

Slum Reclamation and Housing Acts

The housing position continues to be unsatisfactory and no progress whatever has been made in the elimination of sub-standard properties. This condition, unfortunately, is likely to persist until the overall problem of the housing shortage has been overcome.

Consequently, our activities under the Slum Reclamation and Housing Acts have been confined to a re-inspection of premises where orders have already been issued and where deferments have been granted to ensure that the premises are being maintained in a reasonable sanitary condition. In this connection, as agents for Housing Commission, 192 inspections have been made and 13 progress reports submitted to the Commission.

In compliance with notices previously issued, 17 premises were demolished during the year, 16 of which were in the Molesworth Street reclamation area in North Melbourne, and an individual property also in North Melbourne.

The total number of demolitions of dwellings within the City during the year was 22, four additional to those previously mentioned were in the Latrobe Street area necessitated by the Tramway development and one for business extension. This makes a total of 424 demolitions in the City since 1940, 284 of which were demolished as a result of notices served on behalf of the Housing Commission.

The following table shows the number of houses reported, of notices served and of compliance since the coming into operation of the housing legislation in 1940:—

Number of houses reported to the Housing Commission for demolition	538
Number of houses reported to the Housing Commission for repairs	229
Notices served on behalf of the Housing Commission for demolition	434
Notices served on behalf of the Housing Commission for repairs	190
Compliance with notices to date—Demolition	284
Repairs	69
Urgent repairs (where deferment granted)	179

The re-housing of families from the City of Melbourne undertaken by the Housing Commission during the year numbered 72, consisting of 140 adults and 170 children. Of this number only 11, consisting of 18 adults and 20 children, came from premises that had been declared unfit for human habitation within the City area. This now makes the total number of families re-housed from the City 500, consisting of 876 adults and 979 children.

HEALTH ACTS

609 complaints were received and investigated under the Nuisance Sections of the Health Act. These complaints related to such items as leaking roofs, dampness in walls, defective sanitary conveniences, drainage, etc. Notices were served on the owners to carry out the urgent repairs specified. Resulting from current notices issued and those carried forward from previous years repairs and renovations were effected at 545 premises, whilst work was in various stages of progress at a number of the other properties at the close of the year.

As an indication of the constant deterioration taking place in the sub-standard properties, during the wet season in March 108 complaints were received relating to defective roofs.

FOOD AND FOOD PREMISES

Regular attention has been paid by the staff to the important work of inspection of all premises where food is manufactured, prepared, stored or exposed for sale, and in addition to the supervision of food factories, hotels, boarding houses, grocers, greengrocers, butchers, delicatessen, smallgoods and confectionery shops, etc., inspections were made of 472 eating houses and 373 premises where ice cream, cordials, etc., are manufactured, all of which have to be registered annually with the Council. These premises generally were found to be well maintained and in conformity with the Health Acts and Regulations.

Most businesses are gradually regaining their normal conditions, although man-power problems are still evident resulting in the employment of inexperienced staff.

Milk bars throughout the City have continued to claim our special attention, both with regard to the general cleanliness of the premises, utensils and other equipment used in the preparation of drinks and particularly to the condition and cleaning of the glassware and crockery in use.

Samples of "drinking milk" were taken regularly at these premises throughout the year, details of which are reported under the heading of "Food Sampling."

Hotel bars have also been continuously supervised, special attention being given to the cleansing of glasses and the colouring of waste beer, when in most instances it was found that licencees were endeavouring to comply with the Regulations.

Special surveys were also made, at intervals throughout the year, during the rush period—between 5 and 6 p.m.—and conditions were found to be reasonably satisfactory; it was found necessary, however, to take proceedings against six licensed victuallers for failing to colour waste beer, during the period, details of which are shown under the heading of "Prosecutions."

Whilst automatic glass washers have been installed in a number of hotels there is still room for considerable improvement in the appliances provided for the washing of glasses. It is understood that the Government still has under consideration the framing of amendments to the Cleanliness (Food) Regulations to bring about the more hygienic cleansing of glasses in all premises where drinks are served.

The position with regard to glassware, crockery, cutlery, etc., continues to show some improvement and caterers are finding less difficulty in replacing their stock. Every care has been taken during inspections to prevent the use of damaged crockery and glassware and, as a result, 358 pieces of glassware, 769 pieces of crockery, and 133 pieces of kitchenware were seized and destroyed at the various food premises throughout the City. Renovations and repairs were carried out at 21 food premises other than registered premises, the details of which are shown under the heading of "Registered Premises."

FOOD SAMPLING

Regular and systematic collection of food samples for chemical analysis was made. 457 samples were procured and submitted to the City Analyst, the samples comprising—butter 8, cheese 10, coffee 3, coffee and chicory 4, ice cream 7, jam 10, milk 342, mustard 1, pepper 4, sausage meat 33, chopped meat 24, sauces 6, and vinegar 5.

Of the total number of samples submitted, 23, or 5 per cent., failed to comply with the standard. The number of samples below standard include—6 milk, 8 chopped meat and 9 sausage meat.

The total number of milk samples procured during the year was 342, involving 97 vendors, consisting of 25 dairymen, 8 house trade dairies, 1 producer and 63 milk bars. Of this number 336, or 98.3 per cent. of the total from all sources, complied with the standard. Six, or 1.7 per cent., did not comply with the standard. The percentage of failures equals the lowest figure previously obtained in 1947.

Samples taken from milk carts in course of delivery numbered 263, and consisted of 150 from bulk supplies and 113 from bottled milk, whilst 66 samples of "drinking milk" were obtained from City milk bars, 10 from house trade dairies, and one producer's sample taken at the point of delivery.

Of the six samples found below standard, two were from delivery carts, both from bulk supplies, and four represented "drinking milk" from City milk bars. Two samples were deficient in all constituent parts and failed to comply

with the Freezing Point test, three were deficient in non-fats and failed to comply with the Freezing Point test, whilst the other sample was deficient in fats and failed to comply with the Freezing Point test. The six samples failing to comply with the Freezing Point test all indicated the presence of added water. Proceedings were instituted in all cases, details of which are recorded under the heading of "Prosecutions." It is worthy of note that again one case, involving two samples of milk, was dismissed without costs on the plea of "reasonable precautions" by the defendant, notwithstanding that each sample was deficient in non-fat and failed to comply with the Freezing Point test indicating the presence of nine per cent. added water. This is a weakness in the Health Act that the Commission of Public Health might be asked to have rectified.

An analysis of the figures shows the average quality of milk per sample as follows:—

	Total Solids	Non-Fats	Fats
All sources	13.40	9.11	4.29
Bulk supplies	13.46	9.12	4.34
Bottled samples	13.41	9.13	4.28
Producer's sample	13.50	9.40	4.10
Milk bars	13.21	9.01	4.20
House trade dairies	13.76	9.37	4.39

The following comparative table shows the average quality of milk per sample during the past 10-year period, and also the percentage of samples which did not comply with the standard.

Year	No. of Samples	Total Solids	Non-Fats	Fats	Percentage of samples below standard
1940	279	13.24	9.11	4.29	1.7%
1941	281	13.27	8.98	4.26	3.2%
1942	274	13.18	9.03	4.24	2.8%
1943	305	13.12	9.00	4.18	5.8%
1944	331	13.15	8.92	4.20	6.6%
1945	347	13.10	8.93	4.22	4.6%
1946	344	13.39	8.97	4.13	6.9%
1947	346	13.45	9.09	4.30	1.8%
1948	352	13.29	9.04	4.41	1.7%
1949	342	13.40	8.99	4.30	2.5%

The following list gives particulars of the number of samples taken from each vendor or source, and the average quality of the milk supplied. It shows that the average quality of milk is being maintained as the figures are almost similar to those shown for the previous year. (As shown in the previous comparative table the average milk fat per sample was 4.29).

Group "A" represents 15 dairymen (60 per cent. of vendors concerned) from whom seven or more samples were obtained. Group "B" represents five dairymen (20 per cent. of vendors) whose supplies were sampled from four to six times during the year. Group "C" represents five dairymen (20 per cent. of vendors) from whom three or less samples were taken. Group "D" represents producers' samples. Group "E" represents house trade dairies and Group "F" milk bars.

CHEMICAL ANALYSIS OF MILK, 1949
SUMMARY OF AVERAGES

Delivery Carts
GROUP "A"

(Over six (6) samples). Fifteen (15) vendors.
Average Quality per Sample

No.	No. of Samples	Total Solids	Non-Fats	Fats	Remarks
1	8	14.2	9.3	4.9	Two samples below standard
2	21	13.60	8.10	4.50	
3	7	13.6	9.2	4.4	
4	24	13.5	9.1	4.4	
5	10	13.5	9.1	4.4	
6	7	13.5	9.1	4.4	
7	14	13.4	9.0	4.4	
8	7	13.5	9.2	4.3	
9	24	13.3	9.0	4.3	
10	19	13.4	9.2	4.2	
11	22	13.3	9.1	4.2	
12	22	13.2	9.0	4.2	
13	21	13.2	9.0	4.2	
14	8	13.2	9.1	4.1	
15	13	13.2	9.2	4.0	

GROUP "B"

(Over three (3) and under seven (7) samples). Five (5) vendors.

Average Quality per Sample

No.	No. of Samples	Total Solids	Non-Fats	Fats	Remarks
1	6	13.8	9.2	4.6	
2	4	13.6	9.2	4.4	
3	5	13.5	9.3	4.2	
4	5	13.3	9.1	4.2	
5	4	13.1	9.1	4.0	

GROUP "C"

(Three (3) samples and under). Five (5) vendors.

Average Quality per Sample

No.	No. of Samples	Total Solids	Non-Fats	Fats	Remarks
1	2	13.4	9.1	4.3	
2	3	13.3	9.1	4.2	
3	3	13.4	9.4	4.0	
4	2	12.9	9.1	3.8	
5	2	12.7	8.9	3.8	

GROUP "D"

Producers

One (1) vendor

Average Quality per Sample

No.	No. of Samples	Total Solids	Non-Fats	Fats	Remarks
1	1	13.5	9.4	4.1	

GROUP "E"

House Trade Dairies

Eight (8) vendors

Average Quality per Sample

No.	No. of Samples	Total Solids	Non-Fats	Fats	Remarks
8	12	13.7	9.3	4.4	

GROUP "F"

63 Milk Bars

"Drinking Milk"

Average Quality per Sample

No.	No. of Samples	Total Solids	Non-Fats	Fats	Remarks
63	66	13.21	9.01	4.20	Four samples below standard

BACTERIOLOGICAL EXAMINATIONS OF MILK SAMPLES, 1949

The following report has been received from the Dairying Division of the Department of Agriculture, of the bacteriological examination of milk samples within the City area during 1949.

DEPARTMENT OF AGRICULTURE—DAIRYING DIVISION

(1) Raw Milk Samples

Results of the Examination of Samples by the Direct Microscopic Count method, during the period January to December, 1949, from dairies situated in the Melbourne City area:—

Melbourne/Carlton			No.	Samples	Complied
	1	.....	10	8	
	2	.....	13	7	
	3	.....	13	13	
	4	.....	14	10	
Flemington & Kensington			5	.....	8
	6	.....	15	12	
North Melbourne			7	.....	13
	8	.....	12	11	
	9	.....	4	4	
	10	.....	10	7	
	11	.....	13	9	
	12	.....	19	19	
			144	121	84.1% compliance

(2) Pasteurised Milk Samples

Additional samples taken for Special Tests of Pasteurised Milk from a Flemington Dairy.

21 visits	.....	53 samples
of which		
28 complied in respect of Standard Plate Count	.....	52.8%
48 complied in respect of Coliform Test	.....	90.6%
36 complied in respect of Phosphatase Test	.....	100%

SWIMMING BATHS

In addition to the regular sampling for bacteriological examination of the water in the various pools throughout the City carried out during the warm weather, by arrangement with the City Engineer's Department, since the middle of the year, regular weekly tests have been taken of all the pools when in active use by a fair attendance of bathers. The results of these examinations, together with those for free chlorine in the water, give the assurance that the purification plants were operating reasonably satisfactorily. The benefit to be derived from the more regular and frequent tests is that they will enable us to determine more definitely the average condition of the waters throughout the year.

RODENT CONTROL

Constant attention has been given to this important work throughout the City proper; food premises, shops and warehouses have been regularly visited, whilst visits to the outer areas have been made as the occasion demanded.

No abnormal conditions were noticed that would indicate any sickness in the rat population, and consequently no specimens were submitted for bacteriological examination.

The constant depletion of the staff adds considerably to the worry of combatting the rat menace and despite every effort we have been unable to recruit any labour for this important work. The Commonwealth Employment Service has been quite unable to assist us in the procuring of labour and it might be necessary for the Council to advertise the positions and with the prospect of increased remuneration we might be able to fill the positions.

The extent of the operations of both inspectors and rat gang is shown in the following table, in addition to which the rat staff prepared 84,000 poison baits, of which 54,000 were laid by the staff and 30,000 supplied to ratepayers, together with directions as to how baits should be used. We have again followed the practice of making a survey of all premises where poison baits have been laid, from which is ascertained the actual number of baits taken by the rats. As this

averages approximately 80 per cent. of the baits laid it can reasonably be estimated that a very much larger number of rats have been destroyed than is shown in the table as destroyed by trapping and the use of dogs. The practice of following up and inspecting all domestic premises, where ratepayers have obtained poison, has been instituted; this is to ensure that no poison baits are left carelessly around the premises, and where any such baits are found the occupier is instructed to put them in the garbage bin.

At the request of the Department of Public Health a Rat Campaign was held throughout the metropolitan area and provincial cities during the months of June and July. Acting under the direction of the Rat Advisory Committee all municipalities adopted a uniform method in the conduct of the campaign by the distribution of leaflets, by posters and slides on the screens of local cinemas and making rat poison available to ratepayers. In the City 15,000 leaflets were delivered direct to householders and to scholars at the various schools. Advertising posters were placed on all vehicles of the Council's Cleansing Department, posters were also displayed in ironmongers and chemists' shops wherever possible. Slides were shown at all City theatres. Although it is difficult to assess with any accuracy the real value of such campaigns, it must certainly have some effect in making the citizens more "rat conscious." This was definitely noticed in our own area by the increased enquiries for advice and is also reflected in the additional applications for supplies of rat poison.

TABLE 1

Complaints attended to	Notices under Rat Regulations	Premises Visited	No. of premises where structural work carried out	Total No. of rodents destroyed	
458	277	2,400	152	Rats	4,399
				Mice	198
					4,597

The species of rats caught and destroyed during the year is shown in the following table, which gives a comparison for the 10-year period, and shows the differentiation between the sub-species of black rats.

Year	M. Rattus	M. Alex.	M. Norveg	Total
1940	923	1,620	3,933	6,576
1941	924	1,510	4,172	6,606
1942	1,034	1,648	3,298	5,980
1943	951	2,075	4,743	7,769
1944	546	1,540	5,933	8,019
1945	499	1,515	4,975	6,989
1946	698	1,594	4,344	6,636
1947	1,078	1,266	4,136	6,480
1948	630	995	3,817	5,442
1949	1,030	1,055	2,314	4,399

REGISTERED PREMISES

In conformity with the statutory requirements of the Health Acts, 1,742 premises were registered during the year. This indicates an increase of 45 premises during the five-year period 1945-1949. The following schedule gives details of registrations, transfers and other particulars.

Premises	No. Registered	No. not renewed	No. altns. repairs or renovations	No. new registrations	No. of Transfers
Boarding Houses	764	22	60	13	109
Eating Houses	472	24	69	6	85
Ice Cream and Aerated Waters, etc.	373	11	27	21	69
Common Lodging Houses	5	1	—	—	—
Cattle Sale Yard	1	—	—	—	—
Premises where Eggs are Chilled	4	—	—	—	—
Offensive Trades	123	—	17	4	3
Totals	1,742	58	173	44	266

In compliance with the Council's By-laws and Regulations 31 Dancing Saloons, 3 Places of Pastime, 149 Stables and 6 Resting Yards were also registered.

BOARDING HOUSES

Boarding and Lodging House registrations, totalling 769, show a decrease of nine compared with the previous year. These premises are regularly inspected for general cleanliness and to prevent breaches with regard to overcrowding, although this presents particular difficulties at the present time owing to the demand for housing and the increased number of new arrivals; but having regard to the fact that people must be housed, sympathetic consideration is given to all such problems as they arise.

Resulting from current notices and notices served in the previous year, improvements were effected at 60 premises during the year, and from reports submitted it is shown that the large majority of these premises are being well maintained and managed generally in compliance with the Health Act.

EATING HOUSES

The number of registrations of Eating Houses has varied very little over the past few years, although we have to record that there has been a reduction of 18 premises registered as compared with last year. All the premises abolished as Eating Houses have been opened for some other class of business.

Regular inspections of these premises have been made and a reasonable standard of hygiene has been maintained. Improvements and renovations have been carried out at 69 premises during the year.

TRANSFERS

Both with regard to certain classes of boarding houses and eating houses there is a more or less constant change of proprietorship which calls for a strict surveillance of the premises in order to ensure both compliance with the Health Act with regard to the form of transfer and the instruction of new proprietors in all other aspects of the Regulations.

GAS APPLIANCES

The arrangements with the Metropolitan Gas Company regarding applications for the installation of gas cooking appliances in boarding, apartment and dwelling houses, has continued to function satisfactorily. During the year 19 applications were dealt with, 13 were approved whilst approval in six cases was refused because of unsuitable location. As there is still a shortage of sheet iron the enforcement of hoods and flue pipes over gas appliances is only being insisted upon in new installations.

OFFENSIVE TRADES

Applications received under Section 82 of the Health Act for the consent of Council to establish an offensive trade numbered 3, and consent was granted in all instances. The applications referred to sheep skin drying (1), rabbit skin drying (1), and fat rendering for dripping (1). One application to alter and extend premises at a rag picking and sorting establishment was consented to.

The administration of the Offensive Trades Regulations and the relevant sections of the Health Act involved 951 visits of inspection to registered premises the condition of which was generally found to be satisfactory. The trades associated with the animal industry, such as the disposal of dead stock and animal offal, continue to show improvement. Minor improvements were effected at 17 premises. The total number of offensive trades registered for the year was 123, and the classification is shown in the following schedule, which includes four new registrations:—

Bone boiling and milling, 2; fat extracting or melting, 28; fellmongery, woolscouring and woolwashing, 14; flock, shoddy or mungo manufacture, 2; glue or size factories, 1; gut cleaning or scraping, 2; knackers' yards, 2; manure works, 2; marine stores, 10; poultry killing, cleaning and dressing, 8; rag picking and sorting, 2; Soap works, 2; store for skins, hides, hoofs, hair or bones, 51; boiling down works, 1; oil boiling, 1; fish curing, 1; abattoirs, 1; refuse destructor, 1, tip, 1.

HAIRDRESSING SALOONS

Hairdressing establishments both male and female have been regularly inspected throughout the year and have been found to be reasonably well conducted and in compliance with the Regulations made under the Health Act. In carrying out this activity the inspectors work in conjunction with the inspectors of the Hairdressers' Registration Board in an endeavour to bring about a greater uniformity in the administration. This co-operation is working to the mutual satisfaction of both authorities.

STABLES

Stables throughout the whole City area are kept under regular supervision to secure general cleanliness and the regular removal of manure in an endeavour to combat the fly menace. Special care is exercised during the summer months to ensure that the provisions of By-law No. 276 are complied with.

There are now 149 stables and six blocks of land used for resting places for horses registered with the Council, and since the By-law came into operation in January, 1948, 17 stables have been abolished. In most instances the proprietors have resorted to motor transport rather than go to the expense of bringing the stables into compliance as demanded by the By-law. In 46 instances repairs and improvements have been effected to existing premises.

SMOKE NUISANCE

The provisions of the Smoke Regulations are generally being complied with and greater attention is now being given to the regular sweeping of chimneys as a means to this end. Complaints during the year only numbered 25, which seems to indicate that the administration is effective and that the matter is well under control. Alterations were effected to six furnaces, whilst in four instances a switch over to oil fuel and electrical power was effected. A special smoke consuming apparatus was installed in one premises, and minor improvements were carried out in 10 instances at registered cafes and boarding houses.

In one instance, at the northern end of the City, considerable trouble was experienced by the emission of dust and grit from a factory chimney. This was caused entirely by the firm being allotted a very inferior quality of fuel by the Coal Board. On our representation to the management extensive alterations were effected in an endeavour to abate the nuisance. With the completion of the apparatus now being installed it is hoped that the problem will be satisfactorily resolved.

SANITARY SERVICES

Temporary sanitary services were installed in 38 instances where buildings were in course of erection or alteration and at the Henley Carnival, and in five instances sanitary pans are installed at premises where sewerage is not available. These services involved the contractor in 2,236 clearances for the year. The night soil is transported by motor truck to the Melbourne and Metropolitan Board of Works Depot at Campbellfield where it is disposed of.

INVESTIGATIONS

A feature of the departmental work, which brings the officers into close contact with the ratepayers, is the service of giving advice on the various phases of public health. In this connection we are frequently called upon to render assistance to the aged and sick and much useful work has been performed in this direction by the female health inspectors, who have been able to place elderly people in homes or otherwise secure helpful assistance to tide them over their period of incapacity.

This service, together with complaints received involved approximately 1,480 investigations throughout the year. An analysis of these figures show that 458 dealt with the rat problem, 621 related to various phases of defective housing, 74 to foodstuffs and food premises, 101 to unsatisfactory garbage bins and refuse, 25 to smoke nuisance, 48 to yards and drainage of premises, 5 to vermin in dwellings, the remaining 143 being classed as miscellaneous.

PUBLIC BUILDINGS

In conjunction with officers of the Public Health Department, theatres and other public buildings have been regularly inspected both during the day and night. In addition, all dancing saloons and places of pastime registered under the Council's By-laws and Regulations have been under constant supervision. These premises generally are being conducted in conformity with the By-laws and Regulations.

HOUSE TO HOUSE INSPECTIONS

The block system of the house to house survey has been continued throughout the year and is fulfilling its function of ensuring the regular supervision of the general condition of yards, out-buildings, garbage bins, fowl yards, and the accumulation of rubbish, litter and foodscraps, and also the control of rat infestation. During the year 7,414 premises were inspected. Defective or irregular garbage bins were found in 885 instances, accumulation of rubbish likely to harbour rats was found in 150 premises, definite rat infestation was discovered at 210 properties, whilst 34 fowl yards were found not to be in compliance with the Council's By-laws. This work involved the service of 1,279 notices, the majority of which were complied with before the end of the year.

SUMMARY OF ROUTINE WORK CARRIED OUT DURING 1949

No. of complaints received and attended to	1,480
Re-inspections for compliance with notices	2,777
Fire reports received and attended to	374
Inspections and re-inspections under Slum Reclamation and Housing Acts	192
Reports forwarded to Housing Commission	13
Notices served under Slum Reclamation and Housing Acts	—
Specifications forwarded to owners under Slum Reclamation and Housing Acts	—
Inspections and re-inspections made under Health Act	1,742
No. of specifications forwarded to owners and proprietors under Health Act	542
Inspections of boarding and lodging houses	3,198
Inspections of hotel bars	1,443
Inspections of eating houses	6,933
Inspections of ice cream and aerated water premises	3,705
Inspections of factories (where food is manufactured)	1,240
Inspections of other food premises	8,038
Seizure of foodstuffs (consisting of 28 x 4 doz. blocks chocolate and fruit, 2 doz. blocks chocolate and nut, 10 lbs. steak meat, 112 lbs. dried prunes, 50 lbs. cocoanut, 2 x 29 oz. tins apricots, 1 x 8 oz. packet peel, 1 x 24 oz. tin plum and raspberry jam, 6 x 16 oz. tins beetroot, 12 x 24 oz. packets rolled oats).	
Inspections of public buildings (day and evening)	642
Inspections of hairdressing saloons	329
Inspections of offensive trades and cattle sale yards	951
Inspections of vacant land	130
Inspections of yards and refuse	24,733
Inspections of stables and manure bins	1,517
Interviews with property owners, architects, contractors, etc.	8,855
Inspections by female staff of premises where females employed	145
Investigations of infectious disease and instructions to householders (scarlet fever, 31; diphtheria, 34; other infectious diseases, 66)	131
Investigations of tuberculosis and domiciliary visits	1,382
Visits to Health Centres (70) and midwives (31)	101
Returns of infectious disease furnished to Public Health Department	160
Notifications of infectious disease forwarded to headmasters	37
Returns of registrations and transfers forwarded to Public Health Department	310
No. of notices received under Births Notification Acts	1,631
No. of notices received under Births Notification Acts	1,631
Plans of new buildings and alterations examined	89
Notices served to secure the abatement of nuisances—	
(a) Defective sanitary conveniences	117
(b) Defective drainage	45
(c) Dirty premises and yards	83
(d) Accumulation of refuse and rubbish	138
(e) Defective or irregular garbage bins	898
(f) Dirty and defective stables	8
(g) Other nuisances	101
	1,390
Matters referred to other Departments—City Engineer, 41; Building Surveyor, 12; Dog Inspector, 4	57
Premises within the City registered by Factories Department—Factories, 2,858; shops, 4,674	7,532

NEW LEGISLATION

Housing Act 1948—Proclamation that Act come into operation on 9/2/49.
 Health Acts—Proclamation declaring certain areas as Health Areas.
 Amending Offensive Trades Regulations 1949.
 Amending Offensive Trades Regulations 1949 (No. 2).
 Amending Food and Drug Standards Regulations 1949.
 Amending Food and Drug Standards Regulations 1949 (No. 2).
 Amending Food and Drug Standards Regulations 1949 (No. 3).
 Fire Prevention Regulations 1949.
 Amending Meat Supervision Regulations 1949 (No. 2).
 Amending Harmful Gases, Vapours, Fumes, Mists, Smokes and Dusts Regulations 1949.
 Amending Patent Medicine Regulations 1949.
 Amending Meat Transport Vehicles Regulations 1949.

PROSECUTIONS

Proceedings were instituted against 51 offenders for contravention of the Health Acts and Regulations made thereunder. In 17 instances, affecting employees, the cases were withdrawn. In two instances, relating to samples of chopped meat where the excess of preservative was only slight, letters of warning were issued. One case, for failing to register a stable under By-law No. 276, was withdrawn on the payment of costs and the registration of the stable was effected. In one case, involving two samples of milk, the case was dismissed without costs on the plea of reasonable precautions offered by the dairyman.

In 30 instances the defendants were convicted and fined as follows:—

Nature of Offence	No. of Cases	Fines	Costs
Selling adulterated milk	5	£25 0 0	£17 14 0
Selling adulterated sausage meat	9	22 0 0	28 19 6
Selling adulterated chopped meat	6	15 10 0	20 3 0
Failing to colour waste beer	6	23 0 0	12 13 6
Failing to keep premises in a sanitary condition	2	20 0 0	6 6 0
Failing to provide proper garbage bin	2	6 0 0	0 8 0
Totals	30	£111 10 0	£86 4 0

GENERAL

The year has been notable for the number of retirements amongst the staff. Mr. E. T. Wood, Senior Health Inspector, retired after 40 years' service; Mr. F. W. Stubbington, Health Inspector, retired on completion of 28 years' service, whilst Mr. J. I. Thomas retired after 20 years' service with the Corporation, 13 of which was spent in the Department as a Health Inspector. These positions have all been filled. Mr. R. L. Richards, a member of the staff, was appointed Senior Health Inspector; Mr. W. A. Bleazby, a member of the Traffic staff, was appointed to succeed Mr. Thomas, whilst Mr. Stubbington's position was filled from outside the service, Mr. R. E. Quirk being the successful applicant. All the new appointees are carrying out their duties creditably.

It is pleasing to record that the entire staff have again demonstrated their capacity and willingness to discharge their duties at all times and are largely responsible for the fact that the sanitary condition of the City, having regard to all circumstances, has been generally satisfactory.

I wish to record my sincere appreciation of the loyal co-operation and assistance rendered by all the staff, inspectorial, clerical and out-door, during the year.

CONCLUSION

On the eve of my retirement, after 34 years as an officer of the Corporation, I wish to place on record my gratitude and appreciation to the Council, members of the Health Committee and to the senior officers of this department, Dr. J. Dale, Dr. H. Kincaid and Dr. H. Bull, and to all officers of other departments with whom I have been closely associated, for their many acts of courtesy, encouragement and helpful assistance, during my long term of service.

THOS. G. O. JORDAN, F.R.San.I.,
Chief Health Inspector.

Melbourne Analytical Laboratory

27 William Street,
Melbourne.

31st January, 1950.

The Chairman,
Health Committee,
City of Melbourne.

Sir,

We have the honour to report that during the year ended 31st December, 1949, we have received four hundred and fifty-seven (457) samples of Foods and Drugs. The following is a brief summary of the results obtained from the

Analytical Examinations:—

Milk	342 samples	336 complied with the standard. Two were slightly below standard in their amounts of solids not fat. One did not comply with the standard in its amount of total solids and fatty solids (milk-fats). One did not comply with the standard in its amount of solids not fat, the Freezing Point (Hortvet) also did not comply with the standard and indicated the presence of 24% of added water. Two did not comply with the standard in their total solids, solids not fat and fatty solids; the Freezing Points (Hortvet) also did not comply with the standard and indicated the presence of 10% and 14% of added water.
White Pepper	1 sample	Complied with the standard.
Coffee	3 samples	Complied with the standard.
Black Pepper	2 samples	Complied with the standard.
Vinegar	5 samples	Complied with the standard.
Butter	8 samples	Complied with the standard.
Mixed Jam	9 samples	Complied with the standard.
Melon and Ginger	1 sample	Complied with the standard for Jam. Contained Melon and Ginger.
Tomato Sauce	6 samples	No adulteration was detected.
Coffee and Chicory	4 samples	Complied with the standard for Coffee and Chicory.
Mustard Compd.	1 sample	Complied with the standard for Mustard Compound.
Cheese	10 samples	Complied with the standard in Moisture and Fat content.
Long Pepper	1 sample	No adulteration was detected.
Chopped Meat	24 samples	No sulphur dioxide was detected in 15 samples. One contained not more than a trace of sulphur dioxide. The others contained respectively 1.6, 2.0, 3.9, 0.4, 4.8, 0.7, 3.8 and 4.3 grains of sulphur dioxide to the pound. No boric acid, nitrate, saltpetre, or starch was detected.
Ice Cream	7 samples	Complied with the standard in fat. No boric acid, lead or arsenic was detected. The samples were too small for further examination.
Sausage Meat	33 samples	No sulphur dioxide was detected in five samples. Two contained not more than a trace of sulphur dioxide; the others contained respectively 0.7, 0.8, 1.0, 5.3, 4.6, 2.5, 4.2, 1.4, 1.5, 11.4, 1.2, 2.6, 2.3, 0.5, 1.6, 2.7, 4.6, 7.7, 5.6, 1.7, 1.0, 6.9, 2.0, 1.8 and 6.5 grains of sulphur dioxide to the pound. No boric acid, saltpetre, nitrite, or excess starch was detected.

Yours obediently,

(Sgd.) DUNN, SON & STONE,
(Analysts to the City of Melbourne).

Report of Dental Officer

13 McKinley Avenue,
East Malvern, S.E.9.
22nd February, 1950.

The Medical Officer of Health:

Sir,

I beg to submit my report for the year 1949.

	<i>Newry Street, Carlton Health Centre</i>	<i>Kensington Health Centre</i>
Number of children (1-6 years) contacted	478	467
Treatments—Silver nitrate, sod. fluoride, cleaning teeth, instructions to mothers	1,348	1,549
Extractions	12	31
Children referred to Dental Hospital for extractions	19	29
Fillings	370	392
Children with naturally sound mouths, free from caries	31	49
Children with poor oral hygiene	7	5
Children with malformed anterior region of mouth due to thumb or finger sucking or retained use of comforter	12	11
Children treated for Vincent's Disease (Trench Mouth)	4	—

The enthusiasm of parents for dental care of their children is quite marked and the easy attitude engendered in the children to dental inspection and treatment must be of great value in ensuring normally sound dentitions in the future.

Of great value is the saving by early silver nitrate applications to teeth exhibiting, on eruption, faulty calcification due to pre-natal influences; avoidance of early extraction of these deciduous teeth ensuring well developed jaws for the permanent dentition. The efficiency of silver nitrate in these cases has been abundantly proved.

The benefit of very early inspection and treatment (14 months) is becoming more and more apparent and the routine three-monthly check-up ensures that very little can happen without being quickly rectified. This fortunately makes possible the larger numbers receiving attention.

During the year the poliomyelitis outbreak called for extra precautions but caused no interruption of the work of the clinics. I desire to again thank Sisters Baglin, Dwyer and Winter Irving, of Newry Street Centre, and Sisters Price and Deacon for their enthusiasm and helpful co-operation.

E. RAYMOND REEVE, L.D.S., B.D.Sc.

Public Health Laboratory

Bacteriology Department,
University of Melbourne, Carlton, N.3.

1st August, 1950.

Annual Report on the Bacteriological Examinations undertaken on behalf of the Melbourne City Council by the Bacteriological Laboratory, Melbourne University, for the year 1949.

Diphtheria

A total of 278 swabs from case contacts were examined, and from 14 diphtheria organisms were isolated. Of these 11 were typed and two proved virulent to guinea-pig.

Scarlet Fever

A total of 38 swabs were cultured and from 28 haemolytic streptococci were isolated. Of these, 24 were grouped.

Water

Fifteen samples of water from swimming baths were examined and reported for total count of bacteria and B.coli content.

Rectal Swabs

Thirty-four rectal swabs were examined for dysentery.

(Sgd.) M. M. WILSON,

Assistant Director.

RENWICK PRIDE
